

# Local Levee Assistance Program

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## **GUIDELINES FOR PROVIDING FUNDING TO LOCAL PUBLIC AGENCIES UNDER PROPOSITION 84 OF 2006**



*State of California  
California Natural Resources Agency  
Department of Water Resources  
Division of Flood Management  
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DRAFT

## TABLE OF CONTENTS

<b>TABLE OF CONTENTS .....</b>	<b>i</b>
<b>ACRONYMS AND DEFINITIONS.....</b>	<b>iv</b>
Acronyms.....	iv
Definitions.....	iv
<b>PART 1 - INTRODUCTION.....</b>	<b>1</b>
1.01 What is the Local Levee Assistance Program?.....	1
1.02 What strategies does the LLAP use to assist local public agencies?.....	2
1.03 What is the LLCR strategy?.....	2
1.04 What is the LOLE strategy?.....	3
1.05 How will funds be allocated to assist local public agencies? .....	5
1.06 How does the LLAP value and promote environmental stewardship? .....	5
<b>PART 2 – GENERAL CONDITIONS .....</b>	<b>7</b>
2.01 Who is considered an eligible applicant? .....	7
2.02 What are the conditions for LLAP funding? .....	7
2.03 What are the cost sharing requirements for LLAP projects or evaluations? .....	9
2.04 Will the LLAP fund design work related to LLCR projects and what are the requirements for design? .....	9
2.05 What are the environmental requirements for LLAP funding? .....	11
2.06 What are the requirements for funding right of way acquisition? .....	12
2.07 What are the criteria for credit or reimbursement and will credit for work done prior to the execution of a funding agreement be allowed?.....	13
2.08 Will the Department retain a percentage of payments made for work done prior to project or evaluation completion? .....	15
2.09 What are the criteria for project completion? .....	15
2.10 Is a maintenance plan required for LLCR projects?.....	15
2.11 What if a sponsor is unable to complete a project? .....	16
2.12 What are the requirements of a financial plan?.....	16
The Initial Financial Plan .....	16

The Annual Update .....	20
2.13 What triggers the need for an independent peer review? .....	22
<b>PART 3 – APPLICATION PROCESS .....</b>	<b>24</b>
3.01 When will the Department solicit for proposals? .....	24
3.02 Will the Department offer Applicant Assistance Workshops? .....	25
3.03 What are the application requirements? .....	25
Local Levee Critical Repair (LLCR) Applications.....	26
Local Levee Evaluation (LOLE) Applications .....	27
3.04 What is the competitive review process? .....	29
3.05 What is the process for setting project or evaluation priority?.....	29
3.06 How are final priority order and the amount of funding determined? .....	33
<b>PART 4 - AGREEMENTS.....</b>	<b>34</b>
4.01 In general, what provisions are included in project or evaluation agreements? .....	34
4.02 What provisions are included in an LLCR project funding agreement? .....	35
4.03 What provisions are included in an LOLE funding agreement? .....	36
<b>PART 5 – REPORTING AND RECORD KEEPING REQUIREMENTS.....</b>	<b>38</b>
5.01 What are the requirements for submitting progress reports? .....	38
5.02 What are the eligible costs for LLCR funding? .....	38
5.03 What are the eligible costs for LOLE funding? .....	39
5.04 What are the requirements for the post-implementation report? .....	40
5.05 What are the requirements for record keeping? .....	40
5.06 What are the requirements for providing project mapping and spatial information? .....	41
5.07 What is the procedure for amending these guidelines? .....	41
<b>APPENDIX A .....</b>	<b>43</b>
Criteria for LLCR Project Rating .....	43
Table A-1. Rating Criteria for LLCR Funding .....	44
Table A-2. Weighting Factors for LLCR Funding .....	45

<b>APPENDIX B .....</b>	<b>47</b>
Criteria for LOLE Project Rating .....	47
Table B-1. Rating Criteria for LOLE Funding .....	48
Table B-2. Weighting Factors for LOLE Funding .....	49
 <b>APPENDIX C .....</b>	 <b>51</b>
Cost Sharing Enhancements .....	51
Base State Cost-Share .....	51
Habitat, Open-Space, Recreation, and State Facilities Objective Enhancements (Up to a 20 percent increase in the State cost-share) .....	51
Disadvantaged Area Objective Enhancement (increase in the State cost-share up to a maximum 90 percent for project) .....	54
Ecosystem Restoration and Recreation Cost Sharing .....	55
Minimum Local Cost-share .....	56
Documentation .....	56
How to Extract Household Income Data by Census Tracts and Census Block Groups and Estimate Median Annual Household Income .....	57
 <b>APPENDIX D .....</b>	 <b>62</b>
WATER CODE SECTION 12220 .....	62
Figure D-1. Map of the Sacramento—San Joaquin Delta .....	65
 <b>APPENDIX E .....</b>	 <b>66</b>
Water Supply Facilities of the State Water Project .....	66

## ACRONYMS AND DEFINITIONS

Unless the context of the language in the body of these guidelines otherwise states, the following acronyms and definitions provide the intent and meaning of any terms used in these guidelines:

### Acronyms

BCR	Benefit-Cost Ratio
BMS	Bond Management System
CEQA	California Environmental Quality Act, Public Resources Code Sections 21000 et seq.
CFR	Code of Federal Regulations
CPM	Critical Path Method
CVFPB	Central Valley Flood Protection Board
DFIRM	Digital Flood Insurance Rate Map
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
JPA	Joint Powers Authority
LLAP	Local Levee Assistance Program
LLCR	Local Levee Critical Repair
LOLE	Local Levee Evaluation
MND	Mitigated Negative Declaration
NEPA	National Environmental Policy Act
ND	Negative Declaration
PMIB	Pooled Money Investment Board
PSP	Proposal Solicitation Package
USACE	U.S. Army Corps of Engineers

### Definitions

#### ***Agreement***

An agreement entered into by a successful applicant and the Department to provide funds for a project.

#### ***Approved Design***

A design approved by the Department as the basis for funding under the LLCR strategy, substantially conforming to these guidelines.

#### ***Applicant***

A local public agency, including a joint powers agency representing more than one local public agency, which has legal authority and jurisdiction to implement flood control programs and files an application for funding under Proposition 84 of 2006 and these guidelines.

**Assessed Area**

An area within the boundaries of the assessment district which will provide a local public agency cost-share.

**Benefited Area**

An area that receives improved flood protection from the proposed project and it must be the same area for which benefits are estimated for the economic analysis.

**California Median Annual Household Income**

The median annual household income for California reported in the most recent census or updated census-based data.

**California Native American Tribe**

A federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission (NAHC) as defined in the State of California Tribal Consultation Guidelines, Supplement to General Plan Guidelines.

**Community**

Either (a) the specific geographic area that receives a direct reduction in flood risk from the proposed project, or (b) the geographic area of the sponsor, if the local cost-share is derived from throughout the geographic area.

**Construction**

The actions taken to put a designed project into effect.

**Credit**

The Department's recognition of the reasonable in-kind contributions made by the local public agency in the form of work (that would otherwise be eligible for reimbursement) that is performed after the approval of funding, but before the execution of a Funding Agreement between the Department and the Sponsor for the proposed project. Credit may only be applied towards the local cost-share. Any credit remaining beyond the local public agency's cost-share of the project will not be eligible for reimbursement.

**Critical Path Method Diagram**

A schedule that is derived by calculating the total duration of a project or evaluation based on individual task durations and their interdependencies. A CPM diagram is usually depicted in a bar graph format, graphically showing the task durations, interdependencies, milestones.

**Damage**

A range of possible states of levee disrepair, falling into one of the following four categories:

- Critical – A levee (as defined by these guidelines to include any levee, embankment, structure, flood control facility or related structure) that is near failure as evidenced by the existence of any of the following damage conditions,

and which could reasonably be expected to fail during the course of a single flood season or single high water event:

- The presence of erosion, which has encroached into the levee or its foundation (e.g., the projected waterside slope of a levee);
  - Internal erosion caused by seepage through or under the levee during a past flood event (e.g., evidence of boils, or “piping”, that moved fine soils from the levee or its foundation);
  - Active levee instability.
- **Potentially Critical** – A levee that is not likely to fail during the next flood season or single high water event and possesses one or more of the following damage conditions:
  - The presence of erosion, which has encroached or is predicted within the next flood season or single high water event to encroach into the levee or its foundation;
  - Internal erosion caused by seepage through or under the levee has not occurred in a past flood event, but is predicted through engineering analysis to occur at the project design stage (e.g., factor of safety against piping is less than unity);
  - Active levee instability is not evident, but an engineering analysis demonstrates a factor of safety for stability closer to unity than to the conventionally accepted factor of safety (e.g., design stage steady state seepage slope stability safety factor of less than 1.2 for a landside levee slope).
- **Significant** – A levee containing one or more of the following damage conditions that is not likely to fail during the next flood season or single high water event:
  - The presence of erosion, which is unlikely to encroach into the levee or its foundation during the next flood season or single high water event;
  - Internal erosion caused by seepage through or under the levee has not occurred in a past flood event, but an engineering analysis demonstrates an inadequate factor of safety against piping for the design stage;
  - Active levee instability is not evident, but an engineering analysis demonstrates an inadequate factor of safety for stability (e.g., design stage steady state seepage slope stability safety factor of less than 1.4 for a landside levee slope).
- **Not Significant** – A levee that is currently in a condition that may be less than ideal or in need of maintenance so as not to degrade to the point where it contains one or more of the degradation conditions listed above and that is not likely to fail during the next flood season or single high water event.

### ***Department***

The California Department of Water Resources unless otherwise specified.



***Design***

All activities following a feasibility study or pre-design phase leading to physical definition of the project in sufficient detail to enable project construction. All design plans, specifications, reports, or documents will be signed, sealed and prepared under the responsible charge of a professional civil engineer registered in the State of California.

***Director***

The Director of the California Department of Water Resources.

***Disadvantaged Area***

A benefited area with a median annual household income that is less than the disadvantaged household income<sup>1</sup>.

***Disadvantaged Household Income***

A median annual household income that is less than 80 percent of the California median annual household income.

***Economic feasibility***

A factor determined by calculating the ratio of economic benefits to economic costs for a given alternative. A project is “economically feasible” when this ratio is greater than or equal to one.

***Eligible costs***

The reasonable and necessary actual costs associated with either an LLCR or an LOLE project as further described in these guidelines. Eligible costs will be defined within the terms of a funding agreement.

***Emergency Project***

A project that is necessary due to an event that is sudden or unexpected such as natural or man-made disasters which may include catastrophes such as storms, floods, fires, earthquakes, tsunamis (tidal waves), volcanic action, large-scale civil unrest, sudden hazardous material and chemical spills, explosions, and acts of war or terrorism. The project must have been undertaken because an immediate response was necessary to prevent or lessen the loss of, or damage to life, health, property, or essential public services.

***Evaluation***

All testing, laboratory analysis, engineering evaluation, report preparation and related activities undertaken to determine the structural condition of a levee or other flood control facility in a discrete action undertaken under the LOLE strategy of the LLAP.

***Feasibility Study***

An engineering investigation that identifies and evaluates alternatives and results in a report that:

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<sup>1</sup> Median should be used exclusively except where there is insufficient median income information for estimating or determining the median in a particular area.

- a) Provides the information necessary for performing the design and construction of a project;
- b) Demonstrates whether the described approach is economically and technically feasible and;
- c) Determines whether the project is appropriate for construction.

***Funding Agreement***

An agreement between the Department and a project sponsor describing the financial provisions and other conditions under which an LLAP project will be performed.

***Geotechnical Evaluation***

An engineering study that determines whether a levee is capable of safely containing a predetermined water level in the adjacent stream with respect to seepage, underseepage, erosion and slope stability.

***Independent Peer Review***

A review, conducted by an autonomous group of design and construction professionals, of design and construction activities prior to the initiation of physical construction and periodically thereafter on a regular schedule to inform the Department and the project sponsor on the adequacy, appropriateness and acceptability of the design and construction activities for the purpose of assuring public health, safety and welfare until project construction activities are completed.

***Joint Powers Authority***

Any joint powers authority formed pursuant to Section 6500 of the State Government Code (Joint Exercise of Powers Act). In general, two or more public agencies by agreement may jointly exercise any power common to the contracting parties.

***Lead Agency***

According to context, means (a) the agency responsible for environmental documentation or (b) the local public agency designated to lead the project or evaluation when the sponsor is an organization representing more than one local public agency.

***Levee***

A levee, embankment, floodwall, structure, flood control facility or related structure intentionally constructed for the purpose of preventing overflow of a watercourse.

***Local Levee***

A levee or other facility that is not a part of the State Plan of Flood Control for the Central Valley, not located within the legal boundary of the Sacramento-San Joaquin Delta provided in California Water Code Section 12220, or for the purposes of the LOLE program, not an urban non-project levee in the Central Valley eligible for evaluation under Section 5096.955 (a) (2) of the Public Resources Code.

***Local Levee Assistance Program***

The overall program for providing funding to local public agencies under Proposition 84 of 2006, including its constituent LLCR and LOLE strategies.

***Local Public Agency***

Any political subdivision of the State of California duly organized, existing and acting pursuant to the laws thereof, including, but not limited to, a county, city, city and county, district, joint powers agency, or council of governments. A local public agency must have authority to implement flood management projects.

***Maintain***

To keep a project in the state in which it was constructed, preserving its features against failure or decline in functionality, including operation, maintenance, repair, replacement, and rehabilitation when necessary.

***Median Annual Household Income***

The median annual household income for the benefited area reported in the most recent census or updated census-based data provided by a vendor to be selected by DWR.

***Milestone***

A time when a significant portion of a project or evaluation is completed, as defined in the funding agreement as a time for disbursement of State funds.

***Open-Space***

Any parcel or area of land or water that is essentially unimproved and restricted to an open-space use consistent with the uses set forth in California Government Code Section 65560. Open-space can be designated as any of the following:

- Open-space for the preservation of natural resources;
- Open-space used for the managed production of resources, including, but not limited to, forest lands, rangeland, and agricultural lands;
- Open-space for outdoor recreation; and
- Open-space for public health and safety, including, but not limited to, flood plains, watersheds, and areas required for the protection of water quality or groundwater recharge.

***Pre-project costs***

Costs related to an LLCR or LOLE project which, per the conditions described in Part 2, “General Conditions,” of these guidelines, qualify for credit in all respects except that they were incurred before the signing of a funding agreement.

***Project***

When referring to the design or construction of a flood control facility, a project is all engineering, design, preparation for the acquisition<sup>2</sup> of real property interests, relocations, construction and related activities undertaken to implement a discrete action undertaken under the LLCR strategy of the LLAP.

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<sup>2</sup>The acquisition of real property is considered a separate phase and is not part of the LLAP. However, any survey, mapping and design work necessary to acquire real property is considered to be part of the design phase of a project.

When referring to the evaluation of a levee or other flood control facility to determine its structural condition, a project is the laboratory analysis, engineering evaluation, report preparation and related activities undertaken under the LOLE strategy of the LLAP.

***Project costs***

Costs related to LLCR or LOLE projects which qualify for credit or reimbursement in all respects.

***Sacramento-San Joaquin Valley***

Lands in the bed or along or near the banks of the Sacramento River or San Joaquin River, or their tributaries or connected therewith, or upon any land adjacent thereto, or within the overflow basins thereof, or upon land susceptible to overflow therefrom. The Sacramento-San Joaquin Valley does not include lands lying within the Tulare Lake basin, including the Kings River.

***Sacramento-San Joaquin Delta***

See Appendix D for a description and map of the Sacramento-San Joaquin Delta.

***Seepage***

Water passing through a levee under hydrostatic pressure, without any definable channel or duct, and evidenced by wetness of the levee or flowing or standing water on the land side.

***Sponsor***

An applicant who has been awarded and who has accepted funding through the selection process described in these guidelines.

***State***

The State of California, acting through the Department of Water Resources.

***State Plan of Flood Control for the Central Valley***

The levees, weirs, channels, and other features of the federally and State-authorized flood control facilities located in the Sacramento River and San Joaquin River drainage basin for which the Central Valley Flood Protection Board or the Department has given the assurances of nonfederal cooperation to the United States required for the project, and those facilities identified in Section 8361 of the Water Code.

***Underseepage***

Water passing under a levee under hydrostatic pressure, without any definable channel or duct, and evidenced by wetness or flowing or standing water on the land side.

***State Facility***

Either a State transportation facility or a State water supply facility.

***State Transportation Facility***

Means either:

- A State-numbered freeway, expressway or highway route as identified in Division 1, Chapter 2, Article 2 of the California Streets and Highways Code, including

facilities for the transportation of passengers and property to and over any toll bridge, tube or other highway crossing and the approaches to each end thereof, acquired or constructed, or in course of construction by the State; or

- A rail line or ship channel if the State has a substantial ownership interest in stationary facilities located within the benefited area that are closely associated with the rail line or ship channel and the facilities would be adversely affected by flooding in the benefited area. Mere State ownership of land, including submerged land, is not enough to establish that the State has a substantial ownership interest.

***State Water Supply Facility***

A State water supply facility listed in Appendix E

***Total Project Cost***

The portion of the project cost that is to be shared between DWR and the local public agency. The costs contributed by other State or federal agencies are not included in the total project cost.

## PART 1 - INTRODUCTION

### 1.01 What is the Local Levee Assistance Program?

The **Local Levee Assistance Program** (LLAP) was created by the California Department of Water Resources (referred to herein as “Department”) to assist local public agencies responsible for flood control outside the Sacramento-San Joaquin Delta<sup>3</sup>. The LLAP solicits applications, evaluates proposals, and awards funding using monies made available to the Department for levee evaluations and design and construction for critical levee repairs.

In November of 2006 the voters of California approved Proposition 84. Proposition 84 is a 5.4 billion dollar bond measure for a wide variety of projects related to water safety, rivers, beaches, levees, watersheds, parks, and forests. The passage of Proposition 84 included Section 75032 of the California Public Resources Code which states that 275 million dollars will be available to the Department for the following flood control objectives:

- (a) The inspection and evaluation of the integrity and capability of existing flood control project facilities and the development of an economically viable flood control rehabilitation plan.*
- (b) Improvement, construction, modification, and relocation of flood control levees, weirs, or bypasses including repair of critical bank and levee erosion.*
- (c) Projects to improve the Department’s emergency response capability.*
- (d) Environmental mitigation and infrastructure relocation costs related to projects under this section.*
- (e) To the extent feasible, the Department shall implement a multi-objective management approach for floodplains that would include, but not be limited to, increased flood protection, ecosystem restoration, and farmland protection.*

Proposition 84 also included Section 75032.4 of the Public Resources Code which provides that the funds made available by this section are continuously appropriated to the Department.

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<sup>3</sup> See Part 2.02 for a complete definition of the types of projects eligible for LLAP funding.

## **1.02 What strategies does the LLAP use to assist local public agencies?**

The LLAP utilizes two strategies to assist local agencies:

- Local Levee Critical Repair (LLCR) funding, and
- Local Levee Evaluation (LOLE) funding.

## **1.03 What is the LLCR strategy?**

The LLCR was initially developed to implement Governor Schwarzenegger's Executive Order S-01-06 for repair of damaged levees. Following this executive order, the Department repaired over 100 critically damaged levees for which the State has provided operation and maintenance assurances to the federal government. The concept of critical levee repairs on State and federal project levees gave rise to developing a program to perform critical levee repairs on local levees.

Through the LLCR strategy, the Department intends to continue to fund the design and repair of damaged levees. The types of facilities that may be funded is limited to erosion-damaged levees and levees with unstable slopes. This strategy is applicable Statewide.

Construction of projects funded under the LLCR will require a design substantially meeting the provisions in Part 2.04 of these guidelines and approved by the Department. All construction methods, activities, and materials must conform to the drawings, specifications, and design report contained in the approved design. Any changes to the design during construction and after approval by the Department must be approved in writing by the Department.

Proposed projects must be of a type that will repair erosion damage, repair unstable slopes for a levee, or conduct remediation of unstable conditions for any damaged local levee. Projects must result in a complete, sustainable and maintainable facility. Any facility to be repaired must be the responsibility of a local public agency.

Projects must comply with all applicable permits, standards, laws, responsibilities, and other local, State, and federal requirements. These may include, but are not limited to, the regulatory requirements of the Federal Energy Regulatory Commission, the United States Army Corps of Engineers (USACE), the Central Valley Flood Protection Board (CVFPB), the State Water Resources Control Board, and other agencies. Sponsors must also comply with the California Environmental Quality Act (CEQA) (and the National Environmental Policy Act (NEPA) if applicable), State and federal Endangered Species Acts, and the federal Clean Water Act. The sponsor must obtain any permits required for any component of the work before commencing construction of that project component.

The initial amount of funding to be provided for a project will depend on the type of work to be funded. For work related to preparing the necessary environmental

documentation, the funding will be based on the estimated costs for doing all work necessary to prepare the environmental document. For design work, the funding amount will be based on the estimated design costs included in the funding application. For construction work, the funding amount will be based on the contract item unit prices and quantities in the funding application or the approved design (if available at the time of the application), and the cost estimates for specified tasks in the application for State funds. For the work done in preparation of early or advance acquisition of right of way<sup>4</sup>, the funding amount will be based on the cost estimate in the application for State funds.

The funding amount may be further adjusted prior to the execution of a funding agreement to correspond to work done or changes subsequently approved by the Department. A copy of the awarded contract bid, including any bid analysis results, must be provided to the Department. When an agency performs the work directly, the construction item unit prices used to determine the initial funding amount will apply.

Eligible costs (as described in section 5.02) will be funded on a reimbursable basis.

The initial schedule for construction will be derived from the Critical Path Method (CPM) diagram in the approved design, updated as to starting date when such date has been determined. The schedule may be adjusted to reflect changes approved by the Department.

#### **1.04 What is the LOLE strategy?**

In order to obtain or maintain Federal Emergency Management Agency (FEMA) accreditation that a levee provides protection against the 1-percent annual chance of flood, levee owners and local communities have the responsibility to provide documentation that a levee meets the requirements of Title 44 of the Code of Federal Regulations, Section 65.10 of the National Flood Insurance Program regulations (44 CFR Section 65.10). Without this documentation, a local public agency cannot comply with 44 CFR Section 65.10 and the area behind the levee will be mapped as a Special Flood Hazard Zone on the Digital Flood Insurance Rate Map (DFIRM). For further information about FEMA interpretation of Title 44 CFR Section 65.10, see FEMA Memoranda 34 and 43.

The LOLE provides funding to local public agencies Statewide to conduct hydrology and hydraulic studies and geotechnical evaluations of levees that are needed for accreditation by FEMA.

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<sup>4</sup> The term "early or advanced acquisition of right of way" refers to the practice of acquiring land prior to project design approval. The benefits of advanced acquisition are reduced disruption and cost to the public, simplification of potential political challenges to starting a project, and acquiring land at a lower cost due to the potential for future development on or near the land.



Local levees at risk of losing FEMA accreditation or that have lost accreditation since August 2005 due to the implementation of Procedure Memoranda 34 and 43 will be given preference for LOLE funding.

Proposals for evaluations of levees not at risk of losing FEMA accreditation will be considered for funding if the sponsor is able to document that a levee has serious problems with seepage, stability, erosion or underseepage.

To be selected, a proposal must include a geotechnical evaluation and any necessary survey, hydrology, or hydraulic studies. Qualifying evaluation work includes field testing levees by drilling, cone penetration, or other acceptable methods, laboratory testing of the resulting samples, and an engineering study of the levee with respect to seepage, underseepage, erosion and/or slope stability using the data obtained from the testing.

LOLE projects will be selected on a competitive basis and funded under a funding agreement with a local public agency. The Department will select evaluations to receive funding on the basis of the criteria given in Appendix B. Twenty-five percent of available funds will be set aside for projects that benefit an area that would be eligible for an increase in the State cost-share under the disadvantaged area criteria in accordance with Appendix C.

The required components of an LOLE funding application are outlined in Part 3.03 of these guidelines. Applicants must use the format provided in the proposal solicitation package (PSP) which will be made available when the Department announces funding availability through a solicitation notice.

The primary objective of an LOLE is to evaluate the levee stability and susceptibility to seepage and underseepage for FEMA accreditation. Evaluations must meet the conditions for funding described in Part 2.02 and must be sponsored by an agency qualifying under Part 2.01 of these guidelines, but must be conducted on both publicly and privately owned levees. The evaluation must be performed by or under the direction of a professional civil engineer. Evaluations are subject to the requirements of independent peer review. Contracts for engineering or other services must conform to the applicable local and State contracting laws.

Evaluations will produce a written report giving location of all test sites, completed data from field and laboratory tests performed, and engineering analyses of the results with respect to seepage and levee stability.

Evaluations will be required to follow all applicable federal, State, local and industry standards. For evaluations of levees that fall under the jurisdiction of the CVFPB, applicable State standards include the standards found in Title 23, Division 1, Chapter 1, Article 8 of the California Code of Regulations.

Funding of an evaluation under the LOLE does not obligate the Department to fund a feasibility study, design, or construction of any project.

Eligible costs (as described in Part 5.03) will be funded on a reimbursable basis.

The sponsor must obtain any permits required for any evaluation procedure at any site before commencing the procedure.

### **1.05 How will funds be allocated to assist local public agencies?**

The funds allocated for the LLAP will be expended through a competitive solicitation to selected qualified applicants. This program will not be available for levees identified in Cal. Pub. Res. Code § 5096.955 (a)(2) (added by SB 85 in 2007), which are evaluated separately by the Department. If a potential applicant is uncertain regarding whether a particular levee is identified in Cal. Pub. Res. Code § 5096.955 (a)(2), the applicant may contact the LLAP program manager identified in the PSP.

Execution of agreements and disbursements are subject to the availability of funds, including any mandates from the Department of Finance, the Pooled Money Investment Board (PMIB) or any other State authority.

### **1.06 How does the LLAP value and promote environmental stewardship?**

The LLAP is vested in the Department's mission: *To manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments.* Therefore, the LLAP places a high value on the concept of environmental stewardship.

Environmental stewardship is a concept and commitment of responsibility to manage and protect natural resources (water, air, land, plants and animals) and ecosystems in a sustainable manner that ensures they are available for future generations. The goal of environmental stewardship is to create human systems consistent with natural systems, where each is ultimately sustainable. Systems of flood protection are more successful when they accommodate and sustain ecosystem functions.

The LLAP promotes the ethic of environmental stewardship by embracing the broad concepts of impact avoidance and protection of natural resources, minimization, mitigation and restoration and enhancement of natural functions and values. Wherever possible, LLAP funded projects must incorporate ecosystem restoration as an objective and partner with the restoration efforts of others to achieve net environmental benefit. Ecosystem restoration is the process of reestablishing, to the extent possible, the structure, function and composition of the natural environment.

Environmental stewardship is also a part of the California Water Plan. The Department recommends that all funding applicants adopt the California Water Plan and incorporate its recommendations into all water and flood control planning and implementation efforts. More information regarding the California Water Plan can be found at <http://www.waterplan.water.ca.gov/>.

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## **PART 2 – GENERAL CONDITIONS**

### **2.01 Who is considered an eligible applicant?**

An applicant for State funds from the LLAP must be a local public agency or a joint powers authority (JPA) representing more than one local public agency. The local public agency must be responsible for the local levee and be qualified to contract with the State.

On approval of the application and awarding of funds, an applicant may remain a sponsor, or, subject to concurrence by the Department, may transfer such approval to another eligible local public agency to sponsor the project or evaluation.

If an applicant is seeking LLCR funding, the applicant must provide a financial plan that is a comprehensive document that reflects the project's cost estimate and revenue structure and provides a reasonable assurance that there will be sufficient financial resources available to implement and complete the project as planned. The financial plan is not necessary if the applicant is only seeking LOLE funding,

An applicant for LLCR funding must also document that it will be able to ensure the operation and maintenance of the completed project in perpetuity or until the Department agrees in writing that maintenance is no longer required.

### **2.02 What are the conditions for LLAP funding?**

LLAP funds are available Statewide for facilities that are:

- a) Not a part of the State Plan of Flood Control in the Central Valley;
- b) Not located within the Sacramento-San Joaquin Delta; and
- c) Not urban non-project<sup>5</sup> levees in the Central Valley eligible for evaluation under Section 5096.955 (a) (2) of the Public Resources Code.

Disbursement of LLAP funds to a local public agency will be under a funding agreement between the Department and the sponsor. The sponsor must provide a copy of a resolution of its governing board accepting the funds and authorizing specific individuals to sign the funding agreement on behalf of the agency. The sponsor must also provide a resolution authorizing specific individuals to apply for and accept State disbursements.

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<sup>5</sup> An urban non-project levee is defined as a levee protecting at least 10,000 people and not part of either the Sacramento River Flood Control Project, the San Joaquin River Flood Control System, or other flood control feature or on a stream draining into the Central Valley for which the State has constructed the feature and/or provided the nonfederal assurances of operation and maintenance to the federal government.

All funding agreements must be signed by the sponsor. If a funding agreement is not signed within two years of the date that the application is approved, or within six months of the date that the environmental documentation (CEQA and NEPA, if federal funding is included in the project) is complete, the award may be withdrawn.

The Department may enter into a project agreement under the LLCR or an evaluation agreement under the LOLE before the sponsor has obtained all applicable permits, but will not disburse any State funds until the sponsor has complied with all applicable federal, State, and local laws, rules and regulations, and obtained all required permits.

The sponsor must develop a work plan satisfactory to the Department. To assist the sponsor in developing a work plan, the Department may visit the project site to assess its conditions and needs. The Department may confer with the sponsor and other local officials with an interest in the project to convey recommendations and information obtained from these.

For LLCR projects, the sponsor and the Department shall agree on the subdivision of the project into tasks. The sponsor may further subdivide the project into subtasks for its convenience. The work plan must include the specific schedule and tasks of the work to be undertaken and the relationship of tasks to contract items. For LOLE, the tasks may include only:

- Hydrology and hydraulic analysis,
- Geologic and geomorphic investigations,
- Field testing,
- Field surveys,
- Laboratory testing, and
- Engineering analysis and report preparation.

The work plan for an LOLE must include the proposed locations of the test sites and a specific schedule of the work to be undertaken, in relation to the test sites. The work plan must be based on a thorough office study that has considered all hydrologic/hydraulic information and existing drilling and geologic information, as well as a fluvial geomorphologic investigation.

The sponsor may revise the work plan from time to time during the term of the funding agreement with the approval of the Department. Revision of the work plan may result in a redistribution of funds among tasks.

For LLCR projects exceeding \$3,000,000 in total cost, independent peer review of the design is required. If field conditions during construction are substantially different than anticipated during design, subsequent independent peer review will be required.

Compliance with applicable laws, including the provisions of the California Labor Code, will become an obligation of the sponsor under the terms of the funding agreement between the sponsor and the Department. The sponsor must have a labor compliance program that meets the requirements of subdivision (b) of Labor Code Section 1771.5.

The sponsor's Labor Compliance Program must be in place at the time the sponsor performs the LLCR project or LOLE study. The Department will require periodic submission of reports to ensure the sponsor remains in compliance with the California Labor Code. Before submitting an application, applicants are urged to seek legal counsel regarding California Labor Code compliance.

Before the Department will execute the agreement, the sponsor must provide the following:

- A finance plan that demonstrates to the Department's satisfaction the sponsor's ability to complete the project or evaluation.
- Evidence that the sponsor has a labor compliance program.
- For LLCR projects, a finding by an engineer, licensed under the laws of the State of California, that the project is necessary because the local flood control system has been damaged. The finding must be approved and signed by a duly authorized representative of the agency's governing board.

### **2.03 What are the cost sharing requirements for LLAP projects or evaluations?**

The base State cost-share of the overall project shall be 50 percent of the estimated cost of the work for all LLAP projects and evaluations. However, the Department will fund up to 90 percent of the estimated costs for projects that meet certain cost-share enhancement conditions explained in Appendix C. The cost-share formula is subject to a funding cap of up to 90 percent of the project costs.

Sponsors will be expected to contribute the remaining portion of the project or evaluation costs, either through direct contribution or by use of credit. Direct contributions may originate from local, federal or other non-State sources. State funds from any source must not be used as the local cost-share of project or evaluation costs unless specifically authorized to do so by the Legislature. The Department will credit reasonable in-kind contributions made by the local public agency towards the local cost-share.

Work performed before a project agreement is executed may be eligible for crediting against the local cost-share of an LLCR project, as described in Part 2.07 of these guidelines.

### **2.04 Will the LLAP fund design work related to LLCR projects and what are the requirements for design?**

Design work may be funded separately under the LLCR of the LLAP, but must be part of a comprehensive plan to design and construct the necessary improvements of a damaged levee. An application for State funds that includes design must include evidence that the project has completed or is near completion of a thorough pre-design phase that includes activities such as programming and site investigation. In addition,

the application must include a financial plan that meets the requirements of Part 2.12 of these guidelines.

Designs will provide the information needed to begin project construction. This information includes, but is not limited to:

- Drawings showing project features, with enough specificity and completeness so that a general contractor could understand the intent of and bid on the project. All drawings must be signed and stamped by an engineer registered pursuant to California law.
- Project specifications complementing the drawings and providing the written description of project needs. All specifications must be signed by and stamped with the seal of an engineer registered pursuant to California law.
- A detailed cost estimate showing the total project costs by line item. Unit prices must include labor and material costs. The estimate must be certified by an engineer registered pursuant to California law.
- A design analysis or report showing the engineering calculations that were used to determine the size and types of materials used in the design.
- A task breakdown for project construction showing all activities expected to occur during the construction process.
- A schedule for project construction showing the time in calendar days required to complete the project as determined by use of a CPM diagram.
- Procedures by which an independent peer review is being conducted and the results obtained from the independent peer review, if applicable.

Design engineers will be required to follow all applicable federal, State, local and industry standards. For projects which will, if constructed, fall under the jurisdiction of the Central Valley Flood Protection Board, applicable State standards include standards found in Title 23, Division 1, Chapter 1, Article 8 of the California Code of Regulations.

The sponsor shall provide to the Department an information copy of the design criteria, standards or guidelines used by its design engineer. This information must be provided before the final design is submitted to the Department for review. The Department may waive submittal of any such documents that are readily available in-house to Department staff.

Construction of emergency projects may be based on an informal design. Use of an informal design for an emergency project must be approved by the Department in advance of construction. For informal designs, the design portion of the application and the design report may be abbreviated, both subject to Department approval. The Department may, at its sole option, approve these designs verbally subject to written confirmation within 60 days.

## **2.05 What are the environmental requirements for LLAP funding?**

Applicants seeking LLAP funds are required to comply with all applicable requirements of CEQA and submit copies of any appropriate environmental documents, including, but not limited to:

- CEQA/NEPA drafts or final initial study checklists,
- Environmental impact report(s),
- Environmental impact statement(s),
- Environmental assessment(s),
- Negative declaration(s),
- CEQA findings,
- Project approvals and permits and mitigation and monitoring plan(s).

As a Responsible Agency, the Department will review and consider the project's CEQA environmental document(s) prior to providing funding for any project that is subject to CEQA. In cases where CEQA requires findings, the Department will make independent findings pursuant to CEQA based on information provided by the applicant and Lead Agency before entering into a binding agreement authorizing payment.

As the Lead Agency, the local public agency will be responsible for the preparation, circulation, and consideration of the environmental document prior to making any irretrievable commitments of resources for project activities that are subject to CEQA. The local public agency is responsible for determining the appropriate environmental document to comply with CEQA requirements, i.e., a Negative Declaration (ND), a Mitigated Negative Declaration (MND), or an Environmental Impact Report (EIR). The local public agency may use a previously prepared document accompanied by a checklist to determine if the project is adequately covered. If the project is not adequately covered by an existing document, an updated or subsequent document must be prepared. A local public agency must contact the Department before using an existing final document. As a responsible agency, the Department is available to the lead agency and project proponent for early consultation on a project to apprise them of applicable rules and regulations, and provide guidance on issues within its area of responsibility and expertise.

Public Resources Code § 75102 requires that, prior to adoption of a Negative Declaration or Environmental Impact Report for any project to be financed with Proposition 84 funds, the lead agency shall provide notice of the proposed action to a California Native American tribe which is on the contact list maintained by the Native American Heritage Commission, if that tribe has traditional lands located within the area of the proposed project.

Under certain circumstances, the local public agency's project may be exempt from CEQA under a statutory or categorical exemption from CEQA. Statutory exemptions are those granted by the Legislature and the complete list of statutory exemptions can be found in the CEQA Guidelines, Article 18. A categorical exemption is based on a finding by the Secretary for Natural Resources that the class of projects generally does



not have a significant effect on the environment. The list of categorical projects can be found in the CEQA Guidelines, Article 19. For LOLE projects, the sponsor must consider the impacts of accessing and performing sampling and drilling on a project site when determining whether a project is exempt. After determining a project is exempt, and the local public agency approves or determines to carry out the project, the local public agency must file a Notice of Exemption with the County Clerk and provide a copy of the Notice to the Department. A Notice of Exemption will include:

- A brief description of the project;
- A finding that the project is exempt;
- References stating the applicable statutory or categorical exemption in the law or State guidelines; and
- A brief statement supporting the finding of exemption.

Categorical Exemptions may not be used if the project is in an environmentally sensitive area. Compliance with applicable federal environmental regulations, including consultation with federal authorities, is required for some exempt projects.

Detailed requirements are given in the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). For information on how to obtain a copy of CEQA and the CEQA Guidelines, contact the State Clearinghouse at (916) 445-0613.

## **2.06 What are the requirements for funding right of way acquisition?**

An LLCR project may be constructed on land owned by the sponsor or on land that the sponsor has secured the rights to use for construction, operation, and maintenance of the project improvements. The sponsor of an LLCR project may use State funds to perform work in preparation for acquisition of right of way and other real property rights for the project being designed, under the following conditions:

- The sponsor must have a funding source approved by the Department for construction.
- State funds may be used to pay staff salaries, staff expenses, and equipment and materials costs for performing work leading to acquisition of property rights.
- State funds may be used to fund payments for real property rights to be acquired that are necessary and appropriate for the project.
- The sponsor will account for all reimbursable costs of preparing for property rights acquisition as an item in the design task breakdown.
- The sponsor will provide a list of properties for which State funds were expended to prepare for acquisition. The list shall identify which actions, such as parcel descriptions and title searches, were performed for each parcel.

Refer to Part 5.02 of these guidelines regarding the eligible cost of an LLCR project.

## **2.07 What are the criteria for credit or reimbursement and will credit for work done prior to the execution of a funding agreement be allowed?**

Under the LLCR and at the sole discretion of the Department, credit may be issued to the sponsor for a portion of pre-project costs. The sponsor may only use approved credit to reduce the local share of incurred project costs. Approved credit is acknowledgement that the sponsor has incurred expenses that could have been covered if a project agreement had been in place. It does not entitle the sponsor to payment. The Department will issue credit under the following conditions:

- Total credit is limited to a percentage of eligible pre-project costs and will not exceed the sponsor's cost-share of the remaining project costs.
- Credit will only be issued after the sponsor and the Department have executed a project agreement.
- An application for credit must be submitted within 45 days after the execution of the project agreement.
- Costs incurred before the "proposal due date" shown on the invitation to submit proposals for funding will not be credited.
- Construction expenditures will only be creditable if they are incurred after the Department issues a commitment letter and approves the construction plans in writing.

Credit will not be given for the cost of preparing an application.

Credit may be given for the cost of preparing environmental documentation.

Reimbursement is subject to the following limitations:

- For both LLCR projects and LOLE, reimbursement may not exceed:
  - The amount of the award.
  - The State share of the actual cost of the project or evaluation work.
- For LLCR projects, the local public agency share of eligible project costs may be reduced by credits for qualifying pre-project work.
- For LLCR projects, the Department will apply a maximum State funding of \$5,000,000 per project, whether or not the applicant submits applications for more than one project. For LOLE, the Department will apply a maximum State funding of \$2,000,000 per project, whether or not the applicant submits applications for more than one evaluation. The Director may authorize variances to these rules to fund projects or evaluations with exceptional circumstances.
- No more than 10 percent of the total eligible project costs of all described contract items and tasks may be set aside as a contingency fund.
- Contingency funds may be used for any item or task as needed but may not be used for work other than the items or tasks in the project or evaluation agreement.
- If contingency funds are not available, cost overruns for individual contract items or tasks may be covered by State funds only to the extent to which reallocation of

unexpended funds from other contract items or tasks is permitted under the project agreement.

- All reimbursement is subject to availability of funds.

State funds or allocations will generally be paid to local sponsors in arrears on a quarterly reimbursable basis, but in no event more often than monthly, at the Department's discretion, subsequent to submittal and approval of credit or reimbursement requests (invoices) and progress reports. The sponsor must submit credit or reimbursement requests in duplicate on a summary billing form provided by the Department. The Department form will provide a continuous record of payments, retained amounts, and other data. The sponsor must provide the following information:

- The amount requested for payment, before retention, for each item or task.
- The total amount requested.
- The sponsor's request number.
- The State agreement number.
- The date of submittal.
- The beginning and end dates of the work covered by the requested payment. The time periods covered by successive invoices must be continuous and may not overlap.
- A separate explanation of any billed work attributed to past work periods, establishing the appropriateness and non-duplicative nature of the charges.
- An original signature of the sponsor's officer requesting payment on both copies, in blue colored ink.
- One copy of records substantiating the requested payment. For LOLE, substantiating records must include the field location of completed field testing and material sampling sites for laboratory testing.

The Department will return one copy of the summary billing form to the sponsor, completed with cumulative payment and retention information and other information added by the Department.

Funds will be disbursed as provided in the project agreement to reimburse costs incurred by the sponsor, but not until:

- The sponsor complies with all applicable environmental laws and requirements (CEQA and NEPA if federal funding is included in the project).
- All required permits are obtained.

If an LLCR project sponsor fails to comply with the provisions in Part 2.05 of these guidelines regarding environmental documentation, no further payments will be made pursuant to the project agreement until compliance has been attained. Payments may be reinstated at the Department's discretion.

## **2.08 Will the Department retain a percentage of payments made for work done prior to project or evaluation completion?**

The Department will retain 10 percent of all approved payments to assure satisfactory completion of individual items or tasks. The approved completion of items or tasks will be the basis of reimbursement of retained funds. No reimbursement of retention will be made for partially completed items, subtasks, or tasks.

When all work associated with an item or task described in the work plan has been completed to the satisfaction of the Department, and all required products for that item or task have been submitted to and approved by the Department, the sponsor may request payment of retained funds. The Department at its sole discretion may pay the retained funds for that item or task to the sponsor. After the retained funds for an item or task have been paid, no further payment will be made for that item or task.

## **2.09 What are the criteria for project completion?**

The Department will notify the sponsor that the project or evaluation is complete and will release any remaining retained funds when the following criteria are satisfied:

- The work is completed to the satisfaction of the Department.
- The Department has approved all products required by the project or evaluation agreement as provided by the sponsor.
- The sponsor has provided, and the Department has approved, a post-implementation report, as described in Part 5.04 of these guidelines.

## **2.10 Is a maintenance plan required for LLCRC projects?**

For a construction project, the sponsor must provide a maintenance plan satisfactory to the Department that must include:

- A description of the facilities and properties to be maintained.
- The name of the maintaining agency.
- A provision requiring the sponsor to maintain the completed project in perpetuity or until the Department agrees in writing that the project is no longer needed and maintenance is no longer required.
- A description of periodic maintenance activities that will be performed, and the frequency and timing of performance.
- Disclosure of the source of funds for the maintenance.
- A certification under penalty of perjury that the sponsor can pay for maintenance of the project facilities and any land to be acquired from funds available to the sponsor.
- A provision requiring the sponsor to provide annual pictorial reports to the Department each year between July 1 and July 15 describing the maintenance activities performed during the year and any maintenance problems that currently exist.

- A provision that the sponsor assures that the maintenance measures or repairs that the Department deems necessary for preventing degradation of the project will be promptly taken or made.

## **2.11 What if a sponsor is unable to complete a project?**

If for any reason the sponsor is unable to complete the project or evaluation, the Department, at its sole discretion, may:

- Cancel the project or evaluation agreement.
- Complete the project or evaluation using its own resources.
- Contract with the current or any other contractor to complete the project or evaluation.
- Require that the sponsor return all or a portion of State funds, with interest at the general obligation bond rate at the time of default accruing from the date the funds were provided.
- Require that the sponsor pay for all costs (with interest) incurred by the State related to the State completing any portion of a sponsor's project or evaluation.

## **2.12 What are the requirements of a financial plan?**

An LLCR project must include a financial plan. A financial plan provides a description of how a project will be implemented over time by identifying project costs and the financial resources to be utilized in meeting those costs. The plan must clearly explain the assumptions about both cost and revenue upon which the plan is based.

Before developing the financial plan, an applicant must determine what the local cost-share will be in accordance with the Appendix C of these guidelines. If the cost-share factor cannot be determined with a reasonable amount of certainty, the financial plan must reflect the applicant's predicted cost-share as well as a reasonable range of possible cost-shares.

### **The Initial Financial Plan**

The initial financial plan must be submitted with the application for State funds. It will provide information on the immediate and longer-term financial implications resulting from project initiation. The initial plan must consist of at least seven main sections:

- 1) The Statement of Financial Capability - demonstrating that the applicant has the financial resources to adequately fund its portion of the project and a reasonable contingency of at least 10 percent,
- 2) Cost Estimate - in which the total cost and cost-to-complete for major project elements are presented in year of expenditure dollars,
- 3) Implementation Plan - in which the project schedule is presented and the cost-to-complete is presented in annual increments in year of expenditure dollars,
- 4) Financing and Revenues - presented by funding source as annual amounts available for project obligations,

- 5) Cash Flow - an annualized presentation of cash income and outgo to illustrate how periodic bills will be paid,
- 6) Risk Identification and Mitigation Factors, and
- 7) Benefit-Cost Analysis.

### ***Statement of Financial Capability***

The documentation used in preparing the Statement of Financial Capability (analysis) must include audited financial statements for the last three years of an applicant's operations. The Statement of financial capability must include the following elements:

- Evidence of an applicant's authority to use the identified source or sources of funds,
- Information on an applicant's ability to obtain additional funds (if necessary),
- A credit analysis that demonstrates an applicant is credit worthy if it relying on its credit to obtain remaining funds (as in the use of tax exempt bonds, appropriations or a repayment agreement),
- An analysis that demonstrates the projected revenues or proceeds are certain and are sufficient to cover the applicant's stream of costs through time, if the applicant is relying on non-guaranteed debt (for example, a particular revenue source or limited tax, or bonds backed by such a source);
- Comparable data for the third party together with evidence of its legal commitment to the applicant, if the applicant is relying on third party contributions, and
- A list of all cash reserves (restricted and unrestricted) and any planned uses of these reserves.

### ***Cost Estimate***

The purpose of this section is to present the current estimate of the total cost of the project and the remaining cost-to-complete. The total project cost must include all costs and the value of all resources necessary to perform the preliminary engineering including the cost of preparing environmental documentation, right-of-way, environmental mitigation, construction, project management, public outreach, and costs of external third parties such as utility adjustments. All costs must be calculated in accordance with standard accounting methods and generally do not include the costs of acquiring revenue (taxation, mortgage, interest payments, etc). The total cost of the project must be presented as the sum of the costs for each major segment and element of the project. This section must include a narrative describing the assumptions used to arrive at the cost estimates.

All costs must be presented in "year of expenditure" dollars (dollars that are already adjusted for inflation), as it is important that the Financial Plan be consistent in presenting both costs and revenues in comparable dollars.

### ***Implementation Plan***

This portion of the financial plan must present the schedule for completing the project. Estimated expenditures must be covered by projected revenues. The plan must show the schedule for both the initial financial plan that was established and the latest annual update. The methodology including assumptions for future inflation, cost escalation, etc. and reasonableness of the cost estimate must be described. In developing the implementation plan, the sponsor must discuss the likelihood and possible impacts on the implementation plan from a wide array of potential future cost and or revenue changes. For instance, cost changes might result from unforeseen environmental and subsurface conditions, inflation, litigation, technology/innovations, contractor problems, overtime costs to adhere to the schedule, changes in governmental rules impacting the project, value engineering savings, etc. Revenue changes could result from lower than expected toll or tax collections, or a diversion of funds to other projects on the Statewide program, etc.

### ***Financing and Revenues***

The plan must describe all funding sources for the project and must clearly describe these funds as committed, or anticipated amounts, with an evaluation of the likelihood of anticipated amounts being realized.

State or federal funds must be described by funding category under existing legislation and as potential amounts under future legislation. Projected expenditures of funds must be constrained by anticipated annual limitations on State or federal funding obligations.

If special funding techniques such as advance construction are to be utilized, the plan must include estimated annual conversion amounts.

Any portions of the project that are likely to be funded with funds other than State funds must be presented. The amount and sources of revenue for the non-State share must be clearly discussed. If the availability of these funds is limited to certain parts or phases of the project, then those limits must be explained. The financial plan must never assume that there would be future discretionary allocation made for the project. If and when discretionary allocations are enacted, they may be included in the project revenue at the time of the next Annual Update.

The plan must address the potential for unanticipated changes in expected revenue and the impact on the project. Such changes might include delays or decreases in receipt of project funding, reductions in user fees earmarked for the project, changes in governmental rules impacting the project, etc.

### ***Cash Flow***

The key feature of this section is to demonstrate that revenue will be available to permit annual project fund obligations and expenditures as presented in the implementation plan.

The plan must include an annual schedule of cash needs versus available cash to meet those needs. This will demonstrate that the project payout schedule for payments to construction contractors and others can be met. The cash flow analysis must extend through the point that all project expenditures have been met, and all advance construction conversions have been completed.

### ***Risk Identification and Mitigation Factors***

This section must discuss the risk analysis done for the project. It must identify risks to project completion and revenue sufficiency. Identification of those risks and the potential mitigation actions must be described.

All special project cost containment strategies being used or planned for later use must be described. These might include design-to-estimated cost for individual project elements (i.e., limit design so as not to exceed a target construction cost), design-build, use of cost control teams, management cost control strategies, vendor participation via warranties or guarantees, value engineering, incentive and disincentive clauses, etc.

The plan must describe the major responsibilities, financial and otherwise, of the various parties involved in the project and contain evidence of agreements or commitments.

The plan must describe any special or unique agreements, laws, rules, or regulations in addition to CEQA, to which the project is subject. These could include compliance with NEPA, State project-enabling legislation, financial agreements and covenants, accounting system reports and audits, etc.

If pertinent, the plan must discuss the liability for subsequent operation and maintenance costs as segments of the project come on line. On some major projects the opening to traffic of a segment of the project (for example, a tunnel or complex traffic management system) could require significant operational resources while other elements of the project are not complete and still require significant construction expenditures.

Generally, financial plans will not be approved if they include a State or local revenue source requiring future legislative action. This does not refer to the annual or biennial budgetary process used by most local agencies. When the plan calls for mechanisms other than existing revenue streams to meet the non-State revenue needs or to meet cash flow demands, the likelihood of implementing the mechanisms must be thoroughly analyzed. This would apply to mechanisms such as new taxes, future fee increases not currently authorized, contributions from third parties, and short or long-term borrowing. The analysis must address whether authority exists to pursue the mechanisms or must be granted through legislation or other means. In evaluating this portion of the finance plan the State interest will be in the likelihood of realizing the non-State revenues and cash flow as opposed to the choice of mechanism.

The initial submission of the plan will identify the schedule for the future annual updates. It may be advantageous to time the submission of these updates to coincide with the



beginning of the State's fiscal year rather than the anniversary of the approval of the initial financial plan.

### ***Benefit-Cost Analysis***

All applications for LLCR funding must include a benefit-cost analysis that is fundamentally consistent with the federal *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies*, which was adopted by the US Water Resources Council and outlined in Memorandum #66 from DWR Deputy Director dated February 15, 2008. A project with benefit-cost ratios (BCR) of 1.0 or greater has more benefits than costs, and is therefore considered cost-effective.

### **The Annual Update**

For projects that span multiple years, an annual update of the financial plan must be submitted to the Department. Annual updates of the financial plan must provide information on actual cost, expenditure, and revenue performance in comparison to initial estimates as well as updated estimates of future year's obligations and expenditures.

The annual updates will provide information on cost and revenue trends, current and potential funding shortfalls and the financial adjustments necessary to assure completion of the project. The financial plan and its subsequent annual updates will also provide assurance that the project's impact on the local agency's capital improvement program will have been assessed. The projected uses of funding for the project must meet the fiscal constraint requirements for the local agency's planning process.

In addition, the annual updates to the plan will enable decision makers to track the financial progress of the project over time by highlighting significant deviations from the Initial Financial Plan and the subsequent annual updates and explaining the mitigating actions taken to adjust for those deviations.

Each annual update of the Financial Plan must be presented both in total cost (actual cost to date) and cost-to-complete estimates (shown in year of expenditure dollars). These updates must use the same project elements or segment breakpoints to present the cost and revenues as used in the initial financial plan estimate. Any significant change in the total project cost or revenue since the last estimate must be clearly presented and the major reasons for these significant changes must be provided. The update must be organized as follows:

Each of the five sections of the initial financial plan must be updated to reflect any changes that have occurred since the approval of the plan. The following areas must be addressed and incorporated into the appropriate section of the Annual Update:

### ***Cost and Revenue History***

The presentation must clearly summarize significant cost and/or revenue changes from the Initial Financial Plan estimates and discuss the reason(s) for these changes. Any identified or potential funding shortfall must be discussed in detail along with the steps that have been taken, or will be available if needed, to deal with them. As appropriate, the update must discuss mitigating measures that increase project funding and/or reduce project costs, including changes in project scope and design that were undertaken specifically in response to revenue shortfall. Significant changes in project scope must also be discussed and their impact on project costs, both to date and in the future, must be explained. Where appropriate, financial plan updates must track project milestones and compare initial cost and revenue estimates to the actual costs and revenues at these milestone points.

### ***Cost and Revenue Trends***

This discussion must clearly identify the trends that have impacted project costs and revenues in the past year(s), discuss the probable reasons for these trends, and assess the implications of the trends during the remainder of the project. This may be as simple as identifying a change in the anticipated rate of inflation, the availability of materials, the cost of supplies, or the wages paid to project personnel; or as complicated as assessing changes in the competitive arena which have impacted construction bid prices. For each of the trends identified, the annual update must discuss the implications of those trends during the remainder of the project and explain any adjustments that have been made to the financial plan in consideration of those trends.

### ***Summary of Significant Cost Reductions***

A listing of those changes that have reduced the cost of the project by at least 10 percent of the total estimated project cost in the initial financial plan must be presented. These must be presented individually, showing the original cost estimate, the reduced actual or projected cost, and a brief explanation of how or why the reduction was achieved. These changes must be presented by element and include any scope changes made to the project.

### ***Summary of Significant Cost Increases***

There must be a detailed listing of those items that have increased the cost of the project by more than 10 percent of the total estimated project cost in the initial financial plan. These must be presented individually, showing the original cost estimate, the increased actual or projected cost, and a brief explanation of why the increase was necessary. In compiling this list, those increases in cost must be grouped by element and/or changes to the project scope.

## **2.13 What triggers the need for an independent peer review?**

The Department will require an independent peer review of each LLCR project exceeding \$3,000,000 in total cost and for all projects where field conditions during construction are substantially different than anticipated during design. The Department, at its sole discretion, may waive this requirement. However, the Department is unlikely to grant a waiver of the independent review requirement, particularly if one or more of the following factors apply:

- 1) Failure of the project would pose a significant threat to human life or critical infrastructure.
- 2) The project involves the use of non-standard materials, techniques or designs.
- 3) The project design lacks redundancy.
- 4) The project or work has a unique construction sequencing (such as design/build) or accelerated schedule.
- 5) The project is being approved by the USACE under 33 U.S.C § 408.

In performing the independent peer review, the local public agency will select the panel of independent reviewers. The Department will review and approve the selected reviewers as being appropriate for the project. The Department will issue the questions and issues (the charge) to be addressed by the panel. The panel will discuss the strengths and weaknesses, assumptions, calculations, alternate interpretations, methodologies, and conclusions of the project design and construction in accordance with the issued charge. The local public agency will ensure that the charge is fulfilled. Throughout the process, the local public agency must consult in good faith with the Department.

The independent peer review panel will be comprised of at least two and no more than five individuals. Reviewers will be individuals who are distinguished experts in engineering, hydrology and other appropriate disciplines. All independent peer review work must be performed by the individual reviewer. Reviewers must be free from any real or apparent conflict of interest, except as determined by the Department.

The independent peer review will include a review of the design and construction activities prior to the initiation of physical construction, including early design review. The independent peer review will be conducted periodically thereafter on a regular schedule sufficient to inform the Department on the adequacy, appropriateness and acceptability of the design and construction activities for the purpose of assuring public health, safety and welfare. The Department and local public agency shall cooperate to ensure that reviews under this section do not create any unnecessary delays in design and construction activities. At a minimum, all independent peer reviews must consider applicable USACE requirements and the Department's interim levee design criteria.

Independent peer review will be conducted in an open manner. The local public agency will promptly notify and invite the Department to all meetings of the panel. All documents provided to and delivered from the panel of reviewers shall be promptly provided to the Department.

The costs associated with performing the independent peer review are eligible project costs and are to be cost-shared in the same manner as all other eligible project costs. When applicable, the estimated costs of conducting the independent peer review must be included in the application for funding under the LLCR.

The Department retains the sole discretion to require the local public agency to implement the recommendations of the independent peer review panel. If the Department requires changes that affect the final construction of the project, such changes will be cost shared according to the cost-sharing rules established in the funding agreement.

## **PART 3 – APPLICATION PROCESS**

### **3.01 When will the Department solicit for proposals?**

Eligible local public agencies may apply for competitive program funding for LLCR projects or LOLE efforts at such times as the Department may designate. The Department will designate times and funding availability in one or more solicitation notices and Proposal Solicitation Packages for the LLCR and LOLE programs. Applications for proposed projects or evaluations must be submitted in response to a solicitation notice and in accordance with a PSP issued by the Department. The Department will send notices to flood control agencies, and also to all individuals and organizations that have requested notice of the opportunity to submit applications. Notices may be given by mail, electronic mail, website posting, or any other method that provides easy access and prompt availability.

The PSP will be posted on a Department website at <http://www.floodsafe.water.ca.gov>. The PSP will provide detailed instructions on the mechanics of submitting proposals and additional information on submittal requirements. These guidelines, including listed requirements for LLCR and LOLE funding, are considered a part of each PSP.

Applications must be made on a form prescribed by the Department and contained in the PSP. Applicants may obtain a PSP online or request a package by e-mail, mail, telephone, or fax. Addresses are:

E-mail: [dwright@water.ca.gov](mailto:dwright@water.ca.gov)

Mail: David Wright, Program Manager  
Department of Water Resources  
3310 El Camino Avenue  
P.O. Box 219000  
Sacramento, California 95821

Fax: David Wright  
(916) 574-0331

Telephone: David Wright  
(916) 574-2644

In the near future, the LLAP program will utilize the Bond Management System (BMS) for solicitation and management of its funding applications and projects. More information on utilizing the BMS will be made available once the system is fully implemented by the Department. An addendum to these guidelines may be issued to specify the use of the BMS system when the system is finalized.

### **3.02 Will the Department offer Applicant Assistance Workshops?**

Depending upon the anticipated need, the Department may conduct applicant assistance workshops to address applicant questions and to provide general assistance to applicants in preparing their applications. Dates and locations of any scheduled workshops will be provided in the PSP. In addition to the informational workshops, applicants are encouraged to seek assistance from the Department's staff in understanding program requirements and completing applications.

### **3.03 What are the application requirements?**

Applicants must be eligible to receive funding under the provisions of Part 2.01 of these guidelines. Applications from ineligible applicants will not be reviewed or considered for funding.

Applications may include attachments with supplemental materials such as design plans and specifications, detailed cost estimates, feasibility studies, reports on pilot projects, maps, diagrams, letters of support, copies of agreements, records of previous geotechnical explorations, or other applicable items. Applicants seeking an enhanced cost-share formula in accordance with the criteria described in Appendix C must provide sufficient supporting documents in its application and indicate what cost-share it believes is merited for the proposed project. Median annual household income data must be provided for a project seeking an enhanced cost-share formula under the Disadvantaged Area Objective.

Unless otherwise authorized in these guidelines, applications and supporting documents must be made in an electronic format. Files must be readable using Microsoft Office 2007 or lower products (i.e. Word, Excel, PowerPoint, or Access). Spreadsheet documents must be submitted in a Microsoft Excel file type and in a live, unprotected file that includes all formulas, macros, and computations that calculate out to the proposed amounts. Print or scan images of spreadsheets, files containing only values, or "read only" files are acceptable and may be submitted. When scanning documents to an Adobe PDF (Portable Document Format) file, the scanner resolution must be set to at least 200 dots per inch.

If available at the time of solicitation, applications must be submitted via the internet using the Bond Management System website. Otherwise, applications must be submitted on a CD-ROM. CD-ROMs must be labeled with the PSP name, closing date of the solicitation, and name of applicant's authorized representative and agency's name, address, and phone number. The sealed envelope containing the electronic media must be addressed to the office specified in the solicitation, and cites the closing date of the solicitation, the PSP name, and the name and address of the applicant. If using a commercial carrier, ensure that the outermost wrapper is marked with the same information.

Electronically submitted applications must be followed, within three working days, by one printed copy of each submitted item.

All applications and supporting documents must be appropriately date-marked by the submittal deadline. Any material received after the deadline, except printed copies of electronically submitted applications or supporting documents will not be reviewed or considered for funding and will be returned to the applicant.

All information requested in the PSP or in these guidelines must be provided or its omission explained. The Department's staff will review each application for completeness. If the PSP requests information not relevant to a proposal, the applicant must clearly state the reason why the information was not provided. Applications not containing all required information or acceptable reasons for omission will not be further reviewed or considered for funding.

#### Local Levee Critical Repair (LLCR) Applications:

Every complete application for LLCR project funding must contain the following technical information:

- 1) A description of the project.
- 2) A statement that the project sponsor embraces the concept and commitment of environmental stewardship and a description of the opportunities the project will engage to manage and protect natural resources and ecosystems in a sustainable manner.
- 3) A statement that the project is not part of the State Plan of Flood Control, not under consideration by the State for being added to the State Plan of Flood Control, and not located within the legal boundaries of the Sacramento-San Joaquin Delta.
- 4) A description of why the project is urgently needed.
- 5) Documentation demonstrating that the project is in compliance with the State and the federal Endangered Species Acts.
- 6) Evidence that the sponsor has an acceptable labor compliance program in place.
- 7) A schedule for execution of project construction, showing the time in calendar days required to complete each task of the project construction as determined by use of a CPM diagram.
- 8) A project estimate including an estimate of the costs of project management and other supplementary costs.
- 9) The amount of State funding requested, schedule of expenditures, and the sources and amounts of any other funds to be applied toward the project.
- 10) An initial financial plan as described in Part 2.12.
- 11) Justification for the proposed cost-share percentage.
- 12) Citations of the applicant's statutory enabling laws, authority to construct the project, and authority to contract with the State, including a brief description of procedural steps required by the applicant's enabling laws to contract with the State.

- 13) A resolution of the applicant's governing body authorizing a designated representative to sign and submit the application.
- 14) A list of all criteria, standards, and guidelines used by the project designer. If the Department does not have the referenced document readily available, applicant will be required to provide one printed copy within 15 working days of notification from the Department.
- 15) A feasibility study, demonstrating that the project is economically feasible.
- 16) Documentation of compliance with all applicable environmental laws (CEQA and NEPA if federal funding or approval is included in the project) as required in Part 2, "General Conditions," of these guidelines.
- 17) If applicable, documentation of the median annual household income of the benefited area.
- 18) Any additional engineering, technical, financial, economic, environmental or legal analyses and justifications required by the Department during administration of this program and rating of the applications.

An application for a project that does not include design work must also include any design documents (from a separate or completed design effort) meeting the requirements set forth in Part 2.04 of these guidelines, and providing sufficient information to begin project construction. Required documentation includes drawings, specifications, cost estimate, design report, construction task breakdown, and construction schedule.

An application for a project that includes design must also include:

- 1) A task breakdown for the design showing all activities expected to occur during the design process, and including a separate task for any proposed advance preparation for right of way acquisition.
- 2) A schedule for execution of the design, showing the time in calendar days required to complete each task of the design as determined by use of a CPM diagram.
- 3) An estimated total cost for the design, including a detailed breakdown of design costs by task.

#### Local Levee Evaluation (LOLE) Applications:

A complete application for LOLE funding must contain at a minimum the following technical information:

- 1) A description of the evaluation, signed by a civil or geotechnical engineer registered pursuant to California law.
- 2) A map indicating the areas to be evaluated and the transverse and longitudinal locations<sup>6</sup> of the test sites.
- 3) The purpose(s) of the evaluation.

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<sup>6</sup>Use the California Coordinate System of 1983 (CCS83) for all mapping. The accuracy of point data must be better than 1 meter.



- 4) A history of the levee to be evaluated, including descriptions and dates of all previous known instances of seepage, underseepage, or instability and all remedial actions taken.
- 5) A statement that the levee to be evaluated is not a part of the State Plan of Flood Control, not under consideration by the State for being added to the State Plan of Flood Control, and, is not located within the legal boundaries of the Sacramento-San Joaquin Delta, and not an urban non-project levee in the Central Valley eligible for evaluation under Section 5096.955 (a) (2) of the Public Resources Code.
- 6) A statement that the evaluation sponsor embraces the concept and commitment of environmental stewardship and a description of the opportunities the evaluation will engage to manage and protect natural resources and ecosystems in a sustainable manner.
- 7) A statement describing the status of the levee's accreditation by FEMA and the likelihood of becoming unaccredited.
- 8) Evidence that the sponsor has an acceptable labor compliance program in place.
- 9) A task breakdown for the evaluation.
- 10) A report that presents all existing drilling and geologic information, a fluvial geomorphologic evaluation, and existing geotechnical analyses - upon which the work plan is based.
- 11) A schedule for execution of the evaluation, showing the time in calendar days required to complete each task of the evaluation as determined by use of a CPM diagram.
- 12) An estimated total cost for the evaluation, including a breakdown of the cost of each task, including detailed drilling plans, geophysical testing, and engineering analyses.
- 13) The amount of State funding requested and the sources and amounts of any other funds to be applied toward the study.
- 14) Justification for the proposed cost-share percentage.
- 15) Copies of any evaluations previously prepared that support an application for additional evaluation.
- 16) Citations of the applicant's statutory enabling laws and authority to contract with the State, including a brief description of procedural steps required by the applicant's enabling laws to contract with the State.
- 17) A resolution of the applicant's governing body authorizing a designated representative to sign and submit the application.
- 18) Any additional engineering, technical, financial, economic, environmental and legal analyses and justifications required by the Department during administration of this program and rating of the applications.

The Department will acknowledge complete applications from eligible applicants within fifteen days of the submittal deadline. Applications will be reviewed and compared to project or evaluation priority criteria as described in Appendix A for the LLCR and Appendix B for the LOLE.

### **3.04 What is the competitive review process?**

The Department's Division of Flood Management will appoint a Consensus Rating Team composed of at least three non-management staff members and, at the Department's discretion, reviewers from outside the Department. In either case, the Department may request additional consultation with any appropriate Department unit, government agency or other consultant, including but not limited to the Department's Integrated Regional Water Management Program, the Department's Division of Safety of Dams, the Office of Emergency Services, the Department of Fish and Game, and the USACE.

To promote consistency of rating, all Consensus Rating Team members will evaluate all applications, to the extent possible.

For complete applications from eligible applicants, the Consensus Rating Team will endeavor to finish the consensus rating of the projects or evaluations within 60 days following the submittal deadline specified in the PSP.

The Consensus Rating Team will determine which projects are eligible for the funds set aside for projects that benefit a Disadvantaged Area.

The Department may also utilize consultants with expertise in determining the criticality of damage and in performing geotechnical evaluations to advise the Consensus Rating Team on whether damage sites are critical and on whether evaluation proposals are complete and the work plans contain the appropriate activities.

Following completion of the consensus rating of all eligible applications, the Department will convene a selection panel of the Department's managers to review the types, scores, and comments. The Selection Panel will generate priority and funding lists within 30 days following the completion of consensus rating. The Selection Panel will generate a separate priority list for projects eligible for the set aside for those projects that benefit a Disadvantaged Area.

### **3.05 What is the process for setting project or evaluation priority?**

The Department will categorize each proposed project to determine project and evaluation priority. The evaluation forms that will be used are provided in Appendix A for LLCR projects and Appendix B for LOLE.

For LLCR projects, the Department will assign a criticality rating as follows:

- *Critical*  
A levee (as defined by these guidelines to include any levee, embankment, structure, flood control facility or related structure), that has a high probability of failing during the course of a single flood season or single high water event and is near failure as evidenced by one or more of the following damage conditions,

and which could reasonably be expected to fail during the course of a single flood season or single high water event:

- the presence of erosion, which has encroached into the levee or its foundation (e.g., the projected waterside slope of a levee);
- internal erosion caused by seepage through or under the levee during a past flood event (e.g., evidence of boils, or “piping”, that moved fine soils from the levee or its foundation);
- active levee instability.

- *Potentially Critical*

A levee that is not likely to fail during the next flood season or single high water event and possesses one or more of the following damage conditions:

- the presence of erosion, which has encroached or is predicted within the next flood season or single high water event to encroach into the levee or its foundation;
- internal erosion caused by seepage through or under the levee has not occurred in a past flood event, but is predicted through engineering analysis to occur at the project design stage (e.g., factor of safety against piping is less than unity);
- active levee instability is not evident, but an engineering analysis demonstrates a factor of safety for stability closer to unity than to the conventionally accepted factor of safety (e.g., design stage steady state seepage slope stability safety factor of less than 1.2 for a landside levee slope).

- *Significant*

A levee containing one or more of the following damage conditions that is not likely to fail during the next flood season or single high water event:

- the presence of erosion, which is unlikely to encroach into the levee or its foundation during the next flood season or single high water event;
- internal erosion caused by seepage through or under the levee has not occurred in a past flood event, but an engineering analysis demonstrates an inadequate factor of safety against piping for the design stage;
- active levee instability is not evident, but an engineering analysis demonstrates an inadequate factor of safety for stability (e.g., design stage steady state seepage slope stability safety factor of less than 1.4 for a landside levee slope).

- *Not Significant*

A levee that is currently in a condition that may be less than ideal or in need of maintenance so as not to degrade to the point where it contains one or more of the degradation conditions listed above and that is not likely to fail during the next flood season or single high water event.

Criticality will be determined by inspection of structures suspected of being so damaged that, in the opinion of a registered engineer, the structure or levee system is incapable

of safely carrying the design flood flow. The Department will also categorize the project by type. The possible types are:

- 1) Repair of levees damaged by erosion.
- 2) Repair of levees damaged by internal erosion.
- 3) Repair of local levee slope instability.
- 4) Repair of unstable flood control facilities other than levees.

The Department will first fund the critical projects. Within this category, awards will be made first for qualified projects of the first type and, if funds remain, progressing to the next type, until all appropriate projects have been funded or available funds have been expended. If there are funds available for potentially critical projects, awards will be considered first for qualified projects of type 1, and, if funds remain, progressing to the next type until all appropriate projects have been funded or available funds have been expended.

For LOLE, the study types are:

- 1) Geotechnical evaluations of levees exhibiting seepage, underseepage or other signs of instability.
- 2) Geotechnical evaluations of levees that are accredited by FEMA, but are at risk of becoming unaccredited due to geotechnical inadequacies (other than meeting freeboard requirements).

The LOLE program funds studies that evaluate local levees at risk of failing. The Department will presume that levees at risk of losing FEMA accreditation, or that have lost accreditation since August 2005, as a result of implementation of FEMA Procedure Memoranda 34 and 43, fit this profile. However, applicants for facilities that have exhibited problems with seepage, underseepage, or other instability shall be given preference regardless of whether or not the levees are at risk of losing FEMA accreditation. Such problems must be documented in the application.

For LLCR projects or LOLE studies that contain elements of more than one type, the Department will consider each type as a separate project or evaluation for the purposes of applying these priorities and awarding funds. It is the goal of the Department to award LLAP funding to as many sponsors as possible. If funding permits, the Department will consider funding multiple LLCR or LOLE applications from the same sponsor.”

The consensus rating team will individually score proposals in accordance with the competitive criteria in Appendix A for the LLCR and Appendix B for the LOLE. Further details concerning how this scoring will be done may be made available by the Department. The review and score will be based on the merit of the entire proposal as a whole, not the merit of an individual component. Following completion of the individual reviews, the reviewers will discuss the proposals, develop a consensus review and score, and assign a final consensus score.

The Selection Panel will review the types, consensus scores, and comments provided by the Consensus Rating Team. The Selection Panel will recommend projects or evaluations to be funded and submit the recommendations to the Director. The Selection Panel may recommend:

- Allocating any or all of the remaining available LLCR funds to LOLE, or LOLE funds to LLCR projects.
- Allocating partial funding to one or more of the projects or evaluations being funded.

The selection panel will generate a recommended priority and funding list for the Director's approval. If during the competitive review process one or more projects or evaluations become ineligible or are withdrawn, the selection panel will recommend sufficient additional projects or evaluations to utilize available funds. The selection panel will consider the following:

- Amount of funds available for the Program.
- Type.
- Consensus Rating Team review and score.
- The quality of the measures taken to promote environmental stewardship.
- Immediacy of completion of the project or evaluation that may result from the proposal.
- Geographic distribution of funding. The Selection Panel may adjust priorities to improve the equity of distribution throughout the State.
- Number of proposals. The Selection Panel may recommend reducing individual funding amounts from that requested to allow a greater number of high priority proposals to receive funding, or to allocate the remaining balance of available program funds. Such reductions will be weighed against the likelihood that reduced funding would make the proposal infeasible for the sponsor.
- Consistency of consensus rating team scoring. The Selection Panel may adjust individual scores to ensure that rating criteria have been consistently applied.

There will be a separate priority list and funding list for projects that are eligible to receive the funds set aside for projects that benefit a Disadvantaged Area. Priority will be given to Benefit Areas that are economically disadvantaged to a higher degree based on difference between the benefited area's median annual household income and the disadvantaged household income, measured as percentages of the California median annual household income (rounded to the nearest whole percentage).

If the funding available exceeds the amount needed to fund projects that serve a Disadvantaged Area, the excess funds will be made available for other projects (not benefiting Disadvantaged Areas). If the funding available is insufficient to fund the projects that serve a Disadvantaged Area, the projects that are not funded from the funds set aside for these communities will be considered on the same basis as other projects (not benefiting Disadvantaged Areas).

### **3.06 How are final priority order and the amount of funding determined?**

The Director will determine the final priority order and the amount of funding for each project or evaluation on the priority list. Twenty-five percent of the funds will be set aside for projects that serve a Disadvantaged Area and a separate priority list will be developed for projects eligible for these funds. Following the Director's approval, the Department will notify the selected applicants by mail of their selection for awards and the funding amounts and will post the priority list of proposals and recommended funding on a Department website at:

<http://www.floodsafe.water.ca.gov>.

When the applicant indicates acceptance of the funding in writing, the applicant becomes the sponsor. Final award is subject to execution of a satisfactory funding agreement.

## **PART 4 - AGREEMENTS**

Before the Department will make any disbursement for a project or evaluation, the Department and the sponsor must execute a funding agreement. The agreement may require review and approval by the Department of General Services.

### **4.01 In general, what provisions are included in project or evaluation agreements?**

Funding agreements will include provisions suitable for the project or evaluation conditions. At a minimum, all agreements for both LLCR projects and LOLE must include:

- A cost-sharing formula that provides that the sponsor pays a specified percentage of the eligible costs of the project or evaluation.
- A provision that the grantee will be required to keep informed of and take all measures necessary to insure compliance with applicable California Labor Code requirements, including, but not limited to, Section 1720 et seq. of the California Labor Code regarding public works, limitations on use of volunteer labor (California Labor Code Section 1720.4), labor compliance programs, and payment of prevailing wages for work done and funded pursuant to these guidelines.
- For projects that receive funding pursuant to the provisions of Proposition 84, the agreement will require the sponsor to submit verification of a labor compliance program acceptable to the Department that meets the requirements of California Labor Code Section 1771.5. Written evidence of the labor compliance program will need to be submitted to the Department before the project is funded.
- A requirement that the sponsor make a progress report to the Department, as described in Part 5, "Reporting and Record Keeping Requirements," of these guidelines, as a prerequisite to each disbursement. The Department will monitor progress and may withhold up to 100 percent of the currently requested payment if progress is not satisfactory.
- Either a reference to completion milestones defined in the work plan, at which time payment of State funds will be made for completed work, or a statement that payment will be made no more often than monthly but at least quarterly in arrears upon receipt of invoices and progress reports.
- A requirement that the sponsor submit a written post-implementation report as described in Part 5, "Reporting and Record Keeping Requirements," of these guidelines.
- A requirement that the sponsor indemnify and hold the State, its agencies, officers and employees free and harmless from any and all claims or damages (including inverse condemnation) arising out of or in connection with the planning, design, construction, maintenance and/or operation of this project and any material breach of this Agreement by Funding Recipient. Funding Recipient

shall require its construction contractors to name the State, its officers, agents, and employees as additional insured on their liability insurance for activities undertaken pursuant to this Agreement.

- A provision that grantees are subject to State and federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in an application being rejected and any subsequent contract being declared void. Other legal action may also be taken. Applicable statutes include, but are not limited to, Government Code Section 1090, and Public Contract Code Sections 10410 and 10411, for State Conflict of interest requirements.
- Any other requirements deemed necessary by the Department, including increased requirements with regard to indemnification.

#### **4.02 What provisions are included in an LLCR project funding agreement?**

All funding agreements for LLCR projects must include:

- A work plan that includes:
  - A work breakdown showing and describing all contract items and tasks expected to occur during the project.
    - All actual construction work must be listed by contract item as the project would be advertised to a contractor.
    - If the project includes design:
      - Tasks shall be shown for activities expected to occur during design.
      - A task for advance preparation for right of way acquisition, if that activity is to be performed.
    - Contract administration may be listed as a separate task.
  - A work schedule in the form of a CPM diagram. The work schedule must be related to the contract items and tasks, but may be described in terms of the physical works to be constructed.
  - An estimate of the cost of each contract item and task and the amount of each contract item and task that will be funded using State funds.
    - The estimate must have all costs assigned to contract items or tasks.
    - Contract administration may be separated out as appropriate tasks, or may be included in each item related to such costs.
    - No more than 10 percent of the total cost of all described contract items and tasks may be shown in the estimate as a contingency fund.
  - A definition of project milestones, if payment is to be made upon milestone completion.
- A provision that individual contract items or task costs may not overrun or be changed without written approval from the Department.
- A provision that the Department must approve the project design prior to releasing funds or providing credit.



- A provision that if there is a cost overrun with respect to an individual contract item or task of no more than 20 percent of the original estimate, the Department may authorize the use of any available contingency fund or reallocation of unexpended funds for other individual contract items or tasks.
- A provision that if there is a cost overrun or decrease in allocated funds that exceeds 20 percent of the amount originally estimated for an individual contract item or task, the project sponsor and the Department must agree to amend the project agreement.
- A provision that the Department may inspect the project at any reasonable time to ensure it is being carried out in accordance with the work plan, and after completion to ensure that it is being properly maintained.
- A requirement that the sponsor assures that the completed project and any associated environmental mitigation measures will be operated, maintained, repaired, replaced and rehabilitated in perpetuity, in accordance with a maintenance plan prepared by the sponsor and approved by the State, or until the Department agrees in writing that maintenance is no longer required.
- A requirement that the sponsor prepare a maintenance plan as described in Part 2, "General Conditions," of these guidelines.
- A provision that the sponsor will perform the maintenance with its own forces, or will employ another agency or organization satisfactory to the Department.
- A provision that the sponsor will control encroachments on the project facilities and properties, whether unauthorized or permitted, and will not permit any encroachments that will adversely affect the function or maintenance of the project facilities and properties.
- A requirement that if the Department deems maintenance measures, repairs, replacements or rehabilitation necessary, and the sponsor does not, in the opinion of the Department, provide these services promptly, the Department may upon 30 days' written notice enter upon the property, perform the required work, and bill the sponsor and the sponsor will pay the cost of any work so performed.
- If the land upon which the project is built is not owned by the sponsor, a requirement that before beginning construction of the project, the sponsor demonstrate to the Department that it has secured rights-of-way from the owner that give the sponsor and the Department adequate rights to enter the property to construct, maintain, repair, replace, or rehabilitate the project.
- A provision that notwithstanding the contractual ability of the Department to enter the property to do required maintenance, repairs, replacements, or rehabilitation, the Department can seek a court order requiring the sponsor to perform its contractual obligations to do such work and/or pay the Department's costs for doing such work.

#### **4.03 What provisions are included in an LOLE funding agreement?**

All funding agreements for LOLE must include:

- A work plan that includes:

- A task breakdown and CPM diagram showing and describing all activities expected to occur during the evaluation.
- An estimate of the cost of each task and the amount of each task that will be funded using State funds.
  - The estimate must have all costs assigned to tasks.
  - Administrative and similar costs are considered to be included in each task related to such costs, and will not be paid separately.
  - The cost of preparing an LOLE funding application is considered to be included in the total cost of performing all tasks, and will not be paid separately.
  - No more than 10 percent of the total cost of all described contract items and tasks may be shown in the estimate as a contingency fund.
- A provision that if there is a cost overrun with respect to an individual contract item or task of no more than 20 percent of the original estimate, the Department may authorize the use of any available contingency fund or reallocation of unexpended funds for other individual contract items or tasks.
- A provision that if there is a cost overrun or decrease in allocated funds that exceeds 20 percent of the amount originally estimated for an individual contract item or task, the project sponsor and the Department must agree to amend the project agreement.
- A definition of evaluation milestones, if payment is to be made upon milestone completion.
- A provision that the Department may inspect the evaluation work at any reasonable time to ensure it is being carried out in accordance with the work plan.
- A provision that the agreement may need to be approved by the Department of General Services.

## **PART 5 – REPORTING AND RECORD KEEPING REQUIREMENTS**

### **5.01 What are the requirements for submitting progress reports?**

The sponsor or lead public agency will be required to submit progress reports in sufficient detail to substantiate reimbursable expenses. The report will be a key item in evaluating requests for credit or reimbursements, and a credit or reimbursement request must coincide with a report submittal, subject to the following:

- The minimum period of both progress reports and reimbursement requests is one month.
- The maximum reporting period is three months for projects or evaluations having agreements that specify quarterly reporting. This requirement may be met without submitting a credit or reimbursement request.
- For projects or evaluations having agreements that establish milestones, a report shall be made at the end of the month in which the milestone is completed whether or not it coincides with a credit or reimbursement request.
- The time periods covered by successive progress reports shall be continuous but shall not overlap.

Progress reports shall include the following information:

- Records of expenditures.
- Description of activities since the previous report.
- Status of the project or evaluation relative to the progress schedule.
- An estimate of percentage completion of the work.
- The percentages of State and total funding expended.
- Key issues that must be resolved.
- The time period covered by the report.
- A proposed new schedule for the Department's approval if the current schedule is no longer achievable.

The contents of the required progress reports will also be required to include information requested by the Department of Finance relative to accountability for Proposition 84 bond funds. The Department of Finance may also require more frequent reporting. Funding agreements will provide that the Department can change reporting requirements at any time to ensure that the information needs of the Department of Finance are met.

### **5.02 What are the eligible costs for LLCR funding?**

The sponsor will be reimbursed only for the eligible costs described herein. For design work, billing and payment will be based on the cost of work accomplished on the tasks described in the work plan. For construction, billing and payment will be based on the

cost of work accomplished on the contract items and tasks in the estimate in the project agreement. Unit prices will be used only for establishing the amount of State funding.

No costs are eligible and no funds will be disbursed until a project agreement has been executed. Under the conditions described in Part 2, "General Conditions," of these guidelines, the cost of work performed prior to execution of the project agreement may be eligible for credit against the local share of project costs.

Eligible costs only include actual costs directly related to:

- Preparation of any environmental documentation required.
- Performing design activities in accordance with an approved feasibility study, if any, and in accordance with the appropriate environmental document.
- Advance preparation for right of way acquisition, as described in Part 2.06 of these guidelines.
- Right of way acquisitions.
- Necessary relocation expenses for property owners and tenants affected by the project.
- Utility relocations and damages to real property.
- Constructing the project and any mitigation in accordance with an approved design, including project management and other supplementary costs approved in writing by the Department prior to construction.
- Progress reports and the post-implementation report.
- Costs related to conducting an independent peer review.

### **5.03 What are the eligible costs for LOLE funding?**

The sponsor will be reimbursed only for the eligible costs described in this herein. Billing and payment will be based on the cost of work accomplished on the tasks specified in this section.

Project costs are not eligible for reimbursement and funds will not be disbursed until a funding agreement has been executed. Under the conditions described in Part 2.07 of these guidelines, the cost of work performed prior to execution of the project agreement may be eligible for credit against the local share of project costs.

Eligible costs under the LOLE include only those costs directly related to the tasks of:

- Scoping, evaluating and preparing hydrology and hydraulic studies.
- Conducting rotary wash drilling, core drilling, cone penetration, or other acceptable tests.
- Performing laboratory tests on the resulting samples.
- Performing engineering analyses of seepage and stability and reporting on the resulting data.
- Temporary right of way for performing the work.

- Progress reports and the post-implementation report documenting the results of the evaluation.

Credit or reimbursement for administrative costs and overhead, unless separately reported, will be considered to be included in the amounts paid for field testing, laboratory testing, and evaluation and reporting.

Post-implementation reports may also be required to include information requested by the Department of Finance relative to accountability for Proposition 84 bond funds. Requirements for this reporting have not been determined.

#### **5.04 What are the requirements for the post-implementation report?**

Within 90 days after the project or evaluation is completed, the sponsor or lead public agency shall submit a post-implementation report that shall include the following:

- An executive summary not exceeding two pages.
- Records of expenditures.
- Description of project or evaluation activities since the previous report.
- A comparison of the original schedule and the actual schedule.
- A discussion of problems that occurred during the work and how the problems were resolved.
- Submittal of any required products that have not been submitted previously.
- A listing of required products previously submitted, with dates of submittal and the Department approval.
- Mapping or spatial products produced as part of the project.
- A copy of all reports produced

For LLCR projects, the post-implementation report shall also include:

- Photographs of the before-project condition.
- Progress photographs showing project activities and techniques.
- Photographs of the completed project.
- As-built plan drawings.
- A maintenance plan, approved by the Department, as described in Part 2, "General Conditions," of these guidelines.

In addition to the products listed above which will typically be in the form of 1 hard copy, a DVD containing all products produced throughout the life of the project shall be submitted with the post-implementation report.

#### **5.05 What are the requirements for record keeping?**

A sponsor will be required to maintain all records and documents pertaining to a project or evaluation for five years after completion of the work required, and to make all records and documents held by the sponsor pertaining to the project or evaluation available for inspection and audit by the Department or the State Auditor during normal

business hours, both during the project or evaluation and in the five years following completion of the work.

The Department or the State Auditor may audit the records of the project or evaluation at any time within three years after final payment of State funds. The Department may also require funding recipients to permit an annual citizen advisory committee to audit the records of the project or evaluation.

In addition, sponsors must comply with any additional audit requirements imposed by the Secretary of the California Natural Resources Agency in performing the Secretary's obligation to independently audit Proposition 84 funding awards and annually list expenditures.

## **5.06 What are the requirements for providing project mapping and spatial information?**

Any mapping or spatial products produced as part of an LLAP funded project or evaluation must be included with the post implementation report. At a minimum, the following spatial information must be collected and submitted to the Department:

- The location of test sites, bore holes, constructed improvements and distinct project features.
- The elevation of any constructed or surveyed feature.
- Boundaries, such as parcel data and construction limits.

Spatial data may be created by:

- Field Methods
  - Derived from GPS
- Created
  - Scanning maps
  - Digitizing
  - Aerial photography
  - Remote sensing
  - Photogrammetry
  - Combining two or more data sets

Spatial data shall be mapped at a scale appropriate to the source data. The creation and editing of spatial data shall use any available logical constraints. Provide a statement how the spatial data was created, scrubbed and processed. For each spatial product submitted describe the projection, coordinate system and the vertical and horizontal datum used.

## **5.07 What is the procedure for amending these guidelines?**

These guidelines may be amended at the sole discretion of the Department at any time. Amendments to the guidelines will be publically posted and made available for

comment. If an amendment substantively changes these guidelines, such that an applicant can make a showing that it would have qualified and would have submitted a proposal under the amended guidelines, the applicant will be given the opportunity to submit the proposal for review.

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## **APPENDIX A**

### **Criteria for LLCR Project Rating**

The following table lists the rating criteria for LLCR projects. Each proposal must meet all of the acceptability criteria listed at the top of the table.

If the acceptability criteria are met, the Department will determine the criticality and type of project. Competitive criteria will then be used to evaluate the extent to which the applicant's proposal meets a perceived need for local flood control facility repair considered jointly with all other proposals offered in response to a Department issued PSP. Each criterion will be scored on a scale of 1 to 5 with 1 being "low" and 5 being "high." That score will be multiplied by a weighting factor indicating the importance of the criterion. The Department may provide a further description of scoring methods and procedures.

To assist in evaluating individual proposals, the Department and its assisting agencies and consultants may inspect the site, review available records, and consult with the applicant, interested stakeholders, local public agencies, State agencies or federal agencies with an interest in or jurisdiction over any of the criteria listed in the tables in this Appendix.



**Table A-1. Rating Criteria for LLCR Funding**

<b>Acceptability Criterion</b>	<b>Yes</b>	<b>No</b>
• Complete proposal was received on time.		
• Project would be repair of levees that have sustained critical levee, bank, or internal erosion damage, or that have unstable slopes, or other flood control facilities that are unstable.		
• Project would be local, not a part of the State Plan of Flood Control, and not located in the Sacramento-San Joaquin Delta.		
• Project is urgently needed to repair or stabilize levees or stabilize other flood control systems.		
• Applicant or lead applicant is responsible for flood control in the project area.		
• Applicant ensures the operation and maintenance of any completed project.		
• Applicant or lead applicant is qualified to contract with the State.		
• Applicant has a satisfactory Labor Compliance Program in place.		
• Applicant has submitted a satisfactory finance plan.		
• Applicant has submitted a finding of critical damage or instability.		
<b>Criticality</b>	<b>Yes</b>	<b>No</b>
• Is the project repairing critical damage?		
• Is the project repairing potentially critical damage?		
• Is the project repairing significant damage?		
<b>Ranking Criteria</b>	<b>Yes</b>	<b>No</b>
• Repair of levees damages by levee or bank erosion.		
• Repair of levees damaged by internal erosion.		
• Repair of local levee slope instability.		
• Repair of unstable flood control facilities other than levees.		
<b>Benefit-Cost Ratio</b>	<b>Yes</b>	<b>No</b>
• Is the benefit-cost ratio for the project greater than or equal to one?		
• Is the benefit-cost ratio for the State level of project participation greater than or equal to one?		

**Table A-2. Weighting Factors for LLCR Funding**

Competitive Criterion	Weighting Factor	Maximum Score
<b>1. Immediacy of completion</b> <ul style="list-style-type: none"> <li>Can the project be constructed before next flood season begins?</li> <li>Can the project be constructed before the next flood season ends?</li> <li>Is the environmental document completed and have all necessary permits been obtained?</li> </ul>	2	10
<b>2. Protection of lives</b> <ul style="list-style-type: none"> <li>Does the project have significant potential for protecting lives?</li> <li>Does the project protect 200 people or more?</li> <li>Does the project protect 2,000 people or more?</li> </ul>	1	5
<b>3. Protection of property</b> <ul style="list-style-type: none"> <li>Does the project have significant potential for protecting against property damage?</li> </ul>	1	5
<b>4. Protection of critical infrastructure</b> <ul style="list-style-type: none"> <li>Does the project protect highways, streets, transmission lines, pipelines, public buildings, dams, hydroelectric plants, or other public works?</li> <li>Do the works protected perform a function or functions critical to the public good?</li> </ul>	1	5
<b>5. Economic feasibility</b> <ul style="list-style-type: none"> <li>Does the project exhibit a significant value of benefit-cost ratio?</li> </ul>	1	5
<b>6. Flooding Characteristics</b> <ul style="list-style-type: none"> <li>Does the project have the potential of protecting against great depth of flooding? What is the depth protected against?</li> <li>Does the project have the potential of protecting against high floodwater velocities?</li> <li>Would the project protect against unusually high quantities of floating debris?</li> </ul>	1	5
<b>7. Local participation</b> <ul style="list-style-type: none"> <li>Does the applicant propose to contribute funds above the required minimum cost-share, or to provide valuable property or in-kind services?</li> </ul>	1	5
<b>8. Advanced Phasing</b> <ul style="list-style-type: none"> <li>Is the project ready to construct, with a design approved by the Department?</li> </ul>	1	5
<b>9. Probability of Flooding</b> <ul style="list-style-type: none"> <li>What are the current and post-project probabilities of occurrence of flooding?</li> </ul>	1	5
<b>10. Ecosystem Restoration and Environmental Stewardship</b> <ul style="list-style-type: none"> <li>Will the project contribute to ecosystem restoration?</li> <li>Has the sponsor used every opportunity to promote and employ environmental stewardship</li> </ul>	1	10

Table A-2 (continued). Weighting Factors for LLCR Funding

Competitive Criterion	Weighting Factor	Maximum Score
<b>11. Benefit-Cost Ratio</b> <ul style="list-style-type: none"> <li>Is the projects BCR greater than or equal to one; and if not, is the State BCR greater than or equal to one?</li> </ul>	2 (BCR $\geq$ 1 for project) 1 (BCR $\geq$ 1 for State Share)	5
<b>12. Criticality</b> <ul style="list-style-type: none"> <li>Is the project repairing critical damage, potentially critical damage, or significant damage?</li> </ul>	3 (critical) 2 (potentially critical) 1 (significant)	5

## APPENDIX B

### Criteria for LOLE Project Rating

The following table lists the rating criteria for LOLE. Each proposal must meet all of the acceptability criteria listed at the top of the table.

If the acceptability criteria are met, the project category chart will determine whether this is an evaluation of a local levee at risk of losing FEMA accreditation or that has recently lost its accreditation as a result of implementation of FEMA Procedure Memoranda 34 and 43, or a local levee that has exhibited seepage, underseepage or instability problems. The former category is presumed to qualify for LOLE funding and is given preference. The latter category qualifies if the application adequately demonstrates that the levee in question has exhibited problems. The competitive criteria will be used to evaluate the extent to which the applicant's proposal meets a perceived need for local levee evaluation, considered jointly with all other proposals offered in response to a Department issued PSP. Each criterion will be scored on a scale of 1 to 5 with 1 being "low" and 5 being "high." That score will be multiplied by a weighting factor indicating the importance of the criterion. The Department may provide a further description of scoring methods and procedures.

To assist in evaluating individual proposals, the Department may consult with the applicant, interested stakeholders, local public agencies, State agencies or federal agencies with an interest in or jurisdiction over any of the criteria listed in the table in this Appendix.

**Table B-1. Rating Criteria for LOLE Funding**

Acceptability Criterion	Yes	No
• Complete proposal was received on time.		
• Work would consist of geotechnical evaluation of a levee.		
• Levee would be local, not part of the State Plan of Flood Control, not located in the Sacramento-San Joaquin Delta, and not a project levee in the Central Valley eligible for evaluation under Section 5096.955 (a) (2) of the Public Resources Code.		
• Applicant or lead applicant is responsible for flood control in the evaluation area.		
• Applicant or lead applicant is qualified to contract with the State.		
• Applicant has a satisfactory Labor Compliance Program in place.		
• Applicant has submitted a satisfactory finance plan.		
Project Category	Yes	No
1. Applicant seeks to evaluate a local levee that has recently lost, or is known to be at risk of losing, FEMA accreditation due to lack of hydrologic/hydraulic or geotechnical information or potential structural inadequacies with respect to freeboard, seepage, underseepage, erosion or slope stability. (These projects will be presumed to qualify for LOLE funding)		
2. Applicant seeks to evaluate a levee not known to be at risk of losing its accreditation, but known to have freeboard, seepage, underseepage or stability problems (These projects are also eligible for LOLE funding and will awarded funds on a case-by-case basis.)		

**Table B-2. Weighting Factors for LOLE Funding**

Competitive Criterion	Weighting Factor	Maximum Score
<b>1. Critical need for evaluation</b> <ul style="list-style-type: none"> <li>Was the levee accredited by FEMA in 2005, but has since become unaccredited, or at risk of becoming unaccredited, due to lack of hydrologic/hydraulic or geotechnical information or potential structural deficiencies with respect to freeboard, seepage, underseepage, erosion or slope stability?</li> <li>Are there reasons other than lack of hydrologic/hydraulic, geotechnical information or potential structural deficiencies for loss or risk of loss of FEMA accreditation (e.g., inadequate levee maintenance, lack of channel maintenance, unauthorized encroachments)? <i>Note: Non-hydrologic /hydraulic or geotechnical reasons for risk of loss of accreditation weigh against competitiveness of application.</i></li> <li>If there are other reasons for loss or risk of losing accreditation, what steps are being taken to remedy these other issues (e.g., plans, schedules, funding, resources, permits, authorizations).</li> </ul>	2	10
<b>2. Performance History</b> <ul style="list-style-type: none"> <li>Has the levee proposed for evaluation exhibited lack of hydraulic capacity, seepage, underseepage, or signs of instability in recent flood events?</li> <li>Has the levee failed previously?</li> <li>Was the levee remediated after any previous failure, overtopping, seepage or underseepage incident, or sign of instability?</li> <li>Has there been overtopping, seepage, underseepage, or a sign of instability on adjacent or nearby levees of similar construction and foundation conditions?</li> </ul>	1	5
<b>3. Protection of lives and property</b> <ul style="list-style-type: none"> <li>Does the levee proposed for evaluation protect 2,000 people or more?</li> <li>Does the levee protect 200 people or more?</li> <li>Does the levee protect an area where property damage due to flood would be high?</li> <li>Does the levee protect critical infrastructure?</li> </ul>	1	5
<b>4. Potential for levee improvement</b> <ul style="list-style-type: none"> <li>Has a repair or improvement project been proposed previously for the levee proposed for evaluation?</li> <li>Is there a feasibility study underway for improvement of the levee?</li> </ul>	1	5
<b>5. Flooding Characteristics</b> <ul style="list-style-type: none"> <li>Does the levee proposed for evaluation protect against great depth of flooding? What is the depth protected against?</li> <li>Does the project have the potential of protecting against high floodwater velocities?</li> <li>Would the project protect against unusually high quantities of floating debris?</li> </ul>	1	5
<b>6. Local participation</b> <ul style="list-style-type: none"> <li>Does the applicant propose to contribute funds above the required minimum cost-share or evaluate geotechnical adequacy of other local levees without cost sharing?</li> </ul>	1	5

<b>7. Environmental Stewardship</b> Has the sponsor used every opportunity to promote and employ environmental stewardship	1	10
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## APPENDIX C

### Cost Sharing Enhancements

#### Base State Cost-Share

The base State cost-share of the overall project shall be 50 percent. Programs may vary from this base share, but shall not offer less than a 50 percent State share of the total project cost<sup>7</sup>. No applicant may use other State funds for its local share unless the State agency providing those funds is specifically authorized by the Legislature to allow the local public agency to use the funds for its local cost-share. The State agency shall verify and give the applicant its written permission to use the funds provided by the State agency for the local cost-share.

#### Habitat, Open-Space, Recreation, and State Facilities Objective Enhancements (Up to a 20 percent increase in the State cost-share)

These enhancements to the base State cost-share may increase the State share of costs from the base State cost-share up to an additional 20 percent. Applicants may be entitled to enhancements under more than one of the enhancements for contributions toward the habitat, open-space, recreation, and State facilities objectives, but the total percentage increase to the State cost-share for all enhancements in these categories can be no more than an additional 20 percent of the total project cost. Costs that establish eligibility for cost-share enhancements can only be counted toward one objective, so, for instance, costs of preserving open-space cannot also be counted as costs of providing habitat.

**A. Habitat Objective (up to a 20 percent increase in the State cost-share).** For purposes of this provision, habitat improvement means protecting, creating, enhancing or providing opportunities for enhancing endangered species, riparian, aquatic, terrestrial or other important habitats. These habitat improvements shall achieve any of the following objectives beyond what is required to mitigate the project's effects on the environment under CEQA, NEPA, the Clean Water Act, the Federal Endangered Species Act, or the California Endangered Species Act:

- Promote recovery of at-risk native fish, vegetation or wildlife species;

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<sup>7</sup> In addition, the State may cap certain types of project costs at 50 percent. For instance, environmental compliance (CEQA, NEPA, etc.) work directly related to a project will continue to be capped at a 50 percent State cost-share, consistent with current DWR guidelines. This 50 percent cost limitation for specific costs applies irrespective of the actual cost-sharing formula for the underlying project. The State Legislature has also set the State cost-share at 50 percent on project features that are for ecosystem restoration or recreation and are part of a federal flood project (Cal. Water Code Section 12847).



- Improve ecological functions of aquatic and/or terrestrial habitats to support sustainable populations of diverse fish, vegetation and wildlife species;
- Improve conditions for upstream migration, spawning, egg incubation, emergence, rearing and emigration of priority fish species through adjustment of river flows and temperature;
- Cause increases in early life stage survival for priority fish species;
- Improve fish passage through modification or removal of barriers;
- Influence geomorphic processes within the floodplain in a manner that improves habitat or reduces the potential for fish stranding;
- Enhance natural processes to support, with minimal human intervention, natural habitats that support native species;
- Remove and/or prevent the establishment of non-native species; or
- Provide other important habitat restoration opportunities.

The local public agency will be entitled to a 5 percent increase in the State cost-share if at least 5 percent of the total project cost funds habitat improvement, a 10 percent increase in the State cost-share if at least 10 percent of the estimated total project cost funds habitat improvement, a 15 percent increase in the State cost-share if at least 15 percent of the estimated total project cost funds habitat improvement, and a 20 percent increase when 20 percent of the estimated total project cost funds habitat improvement.

**B. Open-Space Objective (up to a 20 percent increase in the State cost-share).**

The local public agency will be entitled to an increased cost-share for the acquisition and preservation of open-space land beyond what is required for the project or mitigation. Such lands may be acquired in fee or subject to restrictions, such as open space or conservation easements that permanently restrict the land to open-space uses and secure the rights necessary for flood management operations and maintenance. . Examples of easements that may qualify include conservation easements created pursuant to Cal. Civil Code § 815 *et seq.* and permanent open-space easements created pursuant to Cal. Gov't Code § 51071 *et seq.* Regardless of whether the land is acquired in fee or protected by an easement, the costs of securing property rights shall be included in the total made towards open-space preservation. The local public agency will be entitled to a 5 percent increase in the State cost-share of the project if at least 5 percent of the total project cost funds the acquisition and preservation of open-space, a 10 percent increase in the State cost-share if at least 10 percent of the estimated total project cost funds open-space, a 15 percent increase in the State cost-share if at least 15 percent of the estimated total project cost funds open-space, and a 20 percent increase in the State cost-share if at least 20 percent of the estimated total project cost funds open-space.

**C. Recreation Objective (up to a 20 percent increase in the State cost-share).**

The local public agency will be entitled to an increased cost-share for the provision of recreational improvements such as picnic areas, foot and bike paths and provides public access to all or nearly all of the project works, except those

areas where public access would constitute a threat to public safety or habitat or would constitute a trespass on private property. These recreational improvements shall achieve any of the following objectives beyond what is required to mitigate the project's effects on the environment:

- Develop and maintain trails for pedestrians, bicycles and/or equestrians;
- Modify the operation of flood protection facilities to increase the diversity and duration of recreational opportunities;
- Enhance the condition and quality of existing recreational facilities;
- Provide facilities for rafting, canoeing, boating, fishing, viewing wildlife, swimming or other water dependent activities;
- Provide interpretive facilities and services that enhance visitor appreciation of natural, historical and cultural resources;
- Relocate major trails to avoid flooding so that they may remain open all year;
- Enhance public beach areas;
- Provide linkage between recreational areas; or
- Provide other important public recreational opportunities.

The local public agency will be entitled a 5 percent increase in the State cost-share of the total project cost if at least 5 percent of the total project cost funds recreation improvements, a 10 percent increase in the State cost-share if at least 10 percent of the estimated total project cost funds recreation improvements, a 15 percent increase in the State cost-share if at least 15 percent of the estimated total project cost funds recreation improvements, and a 20 percent increase in the State cost-share if at least 20 percent of the estimated total project cost funds recreation improvements.

- D. Combination of Habitat, Open Space, and Recreation Objectives (up to a 20 percent increase in the State cost-share).** The local public agency will be entitled to an increase in the State cost-share of the project for significant contributions to the habitat, open-space, and recreation objectives based upon the combination of investments toward each objective. The local public agency will be entitled to a 5 percent increase in the State cost-share if at least 5 percent of the total project cost funds the combination of habitat improvements, acquisition and preservation of open-space, and recreation improvements; a 10 percent increase in the State cost-share if at least 10 percent of the estimated total project cost funds the combination of habitat improvements, acquisition and preservation of open-space, and recreation improvements; a 15 percent increase in the State cost-share if at least 15 percent of the estimated total project cost funds the combination of habitat improvements, acquisition and preservation of open space, and recreation improvements; and a 20 percent increase in the State cost-share if at least 20 percent of the estimated total project cost funds the combination of habitat improvements, acquisition and preservation of open-space, and recreation improvements.

- E. **State Facilities Objective (up to a 20 percent increase in the State cost-share).** The local public agency will be entitled to an increase in the State cost-share of the project for significant contributions to the objective of providing flood benefits to a State facility, i.e. a State transportation facility or State water supply facility. A significant contribution for the State facilities objective requires that State transportation facilities or State water supply facilities receive at least a ten percent increase in flood protection. The increase in flood protection may be determined from either the Department or Board-approved feasibility study report or other supplemental information as deemed appropriate by the Department or Board. The local public agency will be entitled to a 5 percent increase for a project that makes a significant contribution to the objective by benefiting one State facility; a 10 percent increase for a project that makes a significant contribution to the objective by benefiting two State facilities; a 15 percent increase for a project that makes a significant contribution to the objective by benefiting three State facilities; or a 20 percent increase for a project that makes a significant contribution to the objective by benefiting four or more State facilities.

**Disadvantaged Area<sup>8</sup> Objective Enhancement (increase in the State cost-share up to a maximum 90 percent for project)**

Projects that increase the level of flood protection to areas that are economically disadvantaged are eligible for an increased level of State cost-sharing. If the benefited area is a disadvantaged area, the local public agency may receive an increase in State cost-share of the total project cost up to 90 percent maximum State cost-share. The “Disadvantaged Area Objective” enhancement is not subject to the 20 percent cap of habitat, open-space, recreation, and State Facilities objective enhancements. Instead, it is a stand-alone enhancement.

The exact amount of the increase in the State cost-share will depend on the degree to which the benefited area is economically disadvantaged at the time the project agreement is executed. The enhancement is equal to the difference between the benefited area’s median annual household income and the disadvantaged household income, measured as percentages of the California median annual household income (rounded to the nearest whole percentage). Three examples illustrate this approach, assuming \$61,000 California Median Annual Household Income:

- Benefited area “A” has a median annual household income of \$51,800, which is 84.9 percent of the California median annual household income

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<sup>8</sup> The Department has defined the terms “Disadvantaged Area” and “Disadvantaged Household Income” in a manner that is consistent with State law. In legislation passed to implement the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, the legislature defined a “Disadvantaged Area” as “a community with an median annual household income that is less than 80 percent of the statewide median annual household income.” Cal. Water Code § 79505.5(a). In recently enacted AB 1788 (Yamada) (Ch. 579), the legislature again used this definition for purposes of establishing the cost-sharing formulas for federal flood control projects. Cal. Water Code § 12585.7(d)(4).

(\$51,800/\$61,000=84.9 percent). This median annual household income level exceeds the 80 percent threshold for the disadvantaged household income, thus the area would not be eligible for a disadvantaged area State cost-share enhancement.

- Benefited area “B” has a median annual household income of \$42,900, which is 70.3 percent of the California median annual household income (\$42,900/\$61,000=70.3 percent). The difference between the percentage for this median annual household income and the disadvantaged household income is 9.7 percent of the California median annual household income (80%-70.3%=9.7%), thus the area would be eligible for a disadvantaged area State cost-share enhancement of 9.7 percent, which would be rounded to 10 percent; but the overall State cost-share of the total project costs shall not exceed 90 percent.
- Benefited area “C” has a median annual household income of \$33,500, which is 54.9 percent of the California median annual household income (\$33,500/\$61,000=54.9 percent). The difference between the percentage for this median annual household income and the disadvantaged household income is 25.1 percent of the California median annual household income (80%-54.9%=25.1%), thus the area would be eligible for a disadvantaged area State cost-share enhancement of 25 percent; but the overall State cost-share of the total project costs shall not exceed 90 percent.

The median annual household income can be difficult to estimate if the geographic boundaries of the Disadvantaged Area do not exactly match a single census geographic unit (for example, a city, county, census designated place, census tract or census block group) for which median income is routinely reported by the U.S. Census Bureau. If a single census geographic unit does not match the benefited area, then follow the directions included in Exhibit II for determining median annual household income using block group Median Annual Household incomes. This method will provide an approximate estimate of the median annual household income based upon the most recent census<sup>9</sup>. During its application review, The Department will review and may revise this estimate to better match the benefited area’s geographic boundaries and update it for current conditions using data provided by a vendor to be selected by the Department.

### Ecosystem Restoration and Recreation Cost Sharing

The State cost-share for ecosystem restoration and recreation expenditures is set at 50 percent pursuant to Water Code Section 12847. However, for nonfederal projects that include both flood damage reduction and ecosystem restoration (and/or recreation), the

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<sup>9</sup> Prospective applicants may also make a request for assistance from the Department: If a local public agency submits census tract and block groups (not blocks) or shape files for the benefited area, The Department will provide an estimate of the most recent median annual household income and California median annual household income using its vendor-provided data.

State cost-share for ecosystem restoration expenditures (and/or recreation expenditures) can be increased to equal the State cost-share for the project<sup>10</sup>.

### Minimum Local Cost-share

A minimum of 10 percent local cost-sharing toward the total project cost is generally required. The State will not pay more than 90 percent of the total project cost.

### Documentation

A local public agency proposing a project must provide sufficient supporting documents (to be determined by the program) in its application and indicate what cost-share it believes is merited for the project proposed. The documents must include a scope of work and a work plan that explains how the local public agency intends to accomplish its objectives. After review of the application and other relevant information, the Department will make a determination about the applicant's eligibility for cost-share enhancements.

The eligibility of the local public agency for a State cost-share enhancement for contributions towards meeting the State facility and Disadvantaged Area objectives will be determined at the time an agreement is executed and will not be subject to change, except by amendment of the agreement.

The State cost-share for habitat, open-space, and recreation objectives may change from that originally set out in the agreement since the extent to which the local public agency is entitled to an increased State cost-share for these enhancements depends on the financial contributions the local public agency makes towards attainment of these objectives while performing the work provided for in the agreement. The final State cost-share will be established at the project completion/closeout, or any final audit, if any. The State cost-share towards these enhancements will be based on the final contribution to each enhancement made by the local public agency.

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<sup>10</sup> Some bond funds are not available for project features that are solely for ecosystem restoration or recreation.

## How to Extract Household Income Data by Census Tracts and Census Block Groups and Estimate Median Annual Household Income

This method will provide an approximate estimate of Median Annual Household income based upon 2000 census. During its application review, the Department may revise this estimate to better match your area's geographic boundaries and update it for current conditions using data provided by a vendor to be selected by the Department.

1. Obtain map of benefited area (receives improved flood protection).
2. Census 2000 maps can be found at the American FactFinder website [http://factfinder.census.gov/home/saff/main.html?\\_lang=en](http://factfinder.census.gov/home/saff/main.html?_lang=en)
3. To obtain U.S. Census Bureau 2000 maps by census tracts and block groups follow one of methods listed below:
  - a) Highlight "MAPS" on the left side menu bar and click on "Reference Maps (boundaries)."





U.S. Census Bureau

American FactFinder

Home Search Feedback FAQs Glossary Site Map Help

POPULATION FINDER  
FACT SHEET  
PEOPLE  
HOUSING  
BUSINESS AND GOVERNMENT  
ABOUT THE DATA  
DATA SETS  
DOWNLOAD CENTER  
MAPS  
Thematic Maps (data)  
Reference Maps (boundaries)  
TOOLS AND REFERENCES

Reference Maps (boundaries) - Ame...

Reference Maps

Reference Maps show selected geographic boundaries for an area along with orienting features, such as roads. Boundary selections are available for geographic areas for which statistical data have been tabulated. For quick access to Reference Maps, choose from the selections below.

Select a boundary grouping:

☐ 2008 Cities and Towns ☐ 2000 Census Tracts and Blocks  
☐ 110th Congressional Districts ☐ 2000 Metropolitan Areas  
☐ 2007 Economic Places ☐ 2000 American Indian Areas

Select a state or enter a ZIP code. Click 'GO':

State:  ZIP code:

Working with Reference Maps

You can change the view of the Reference Map by:

- selecting a different geographic area by using the link at the top of the page
- changing the boundaries displayed on the map by clicking the boundaries link
- clicking on the zoom and pan buttons, then clicking or dragging the map

Reference Maps

View as a layer: [Main](#) • [All Data Sets](#) • [Geography](#) • [All results](#)

Change:

- [Reference Maps](#)
- [Features](#)
- [Data](#)

Map Settings:

- [All Data Sets](#)
- [ZIP codes](#)
- [All reference boundaries](#)
- [The selected boundary](#)

Click map to:

Zoom in Zoom out

For help with using Reference Maps, see the [Creating and Using Maps Tutorial](#)

Source: U.S. Census Bureau. Last Revised: November 10, 2008

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b) Go to the U.S. Census Bureau 2000 State Census Data Center website at <http://www.census.gov/sdc/>; Click on the “State Data Center Network” tab along the top menu bar.

## APPENDIX C

Click on the State of California in the map. It will take you to the list of California's State Census Data Centers. Call one of the centers and they will be able to help you in getting the appropriate census tracts and block map for the benefited area.

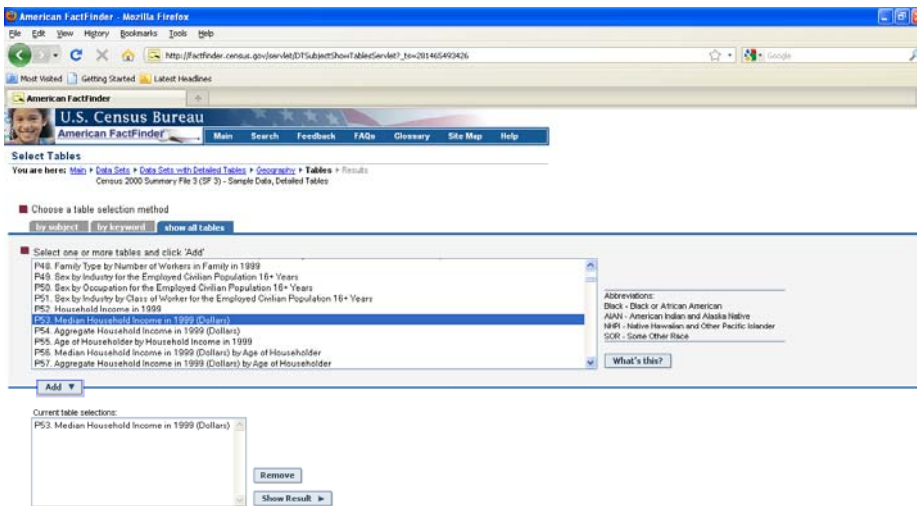
4. Determine census tracts and census block groups for the benefited area.
5. Go to American FactFinder website at  
[http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds\\_name=DEC\\_2000\\_SF3\\_U&\\_lang=en](http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U&_lang=en)
6. Select the geographic type as "Block Groups."
7. Select the state as California.
8. Select the appropriate County.
9. Select one of the census tracts from your benefited area.
10. Select all the block groups within the selected census tract from your benefited area and click on the "Add" button.
11. Repeat steps 9 and 10 until all census tracts and block groups have been selected. See example below for Yuba County.

The screenshot shows the American FactFinder 'Select Geography' page. The user has navigated to the 'Data by Geography' section. The 'Choose a selection method' dropdown is set to 'list'. The 'Select a geographic type' dropdown is set to 'Block Group'. The 'Select a state' dropdown is set to 'California'. The 'Select a county' dropdown is set to 'Yuba County'. The 'Select a census tract' dropdown is set to 'Census Tract 406'. Under the 'Select one or more geographic areas and click 'Add'' section, a list of block groups is shown: 'All Block Groups', 'Block Group 1', 'Block Group 2', 'Block Group 3', 'Block Group 4', and 'Block Group 5'. All these options are checked. The 'Add' button is clicked, and the 'Current geography selections' list is updated to show the selected areas. The 'Next' button is visible at the bottom right of the selection list.

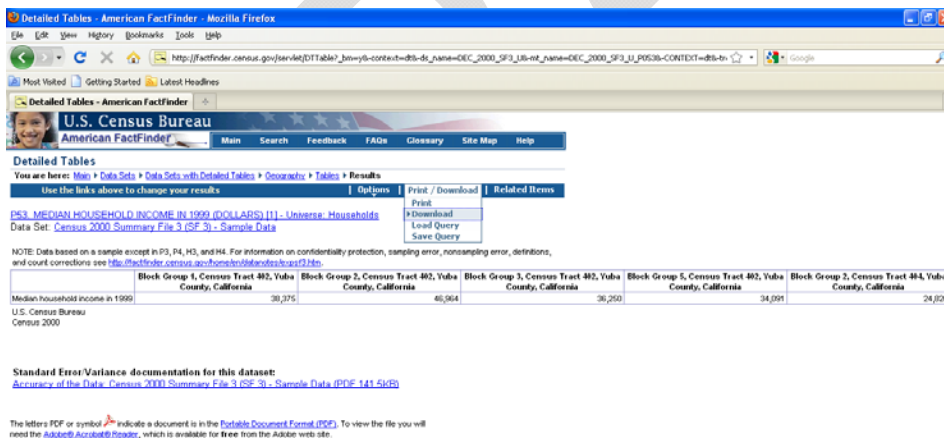
12. Click on the "Next" button.



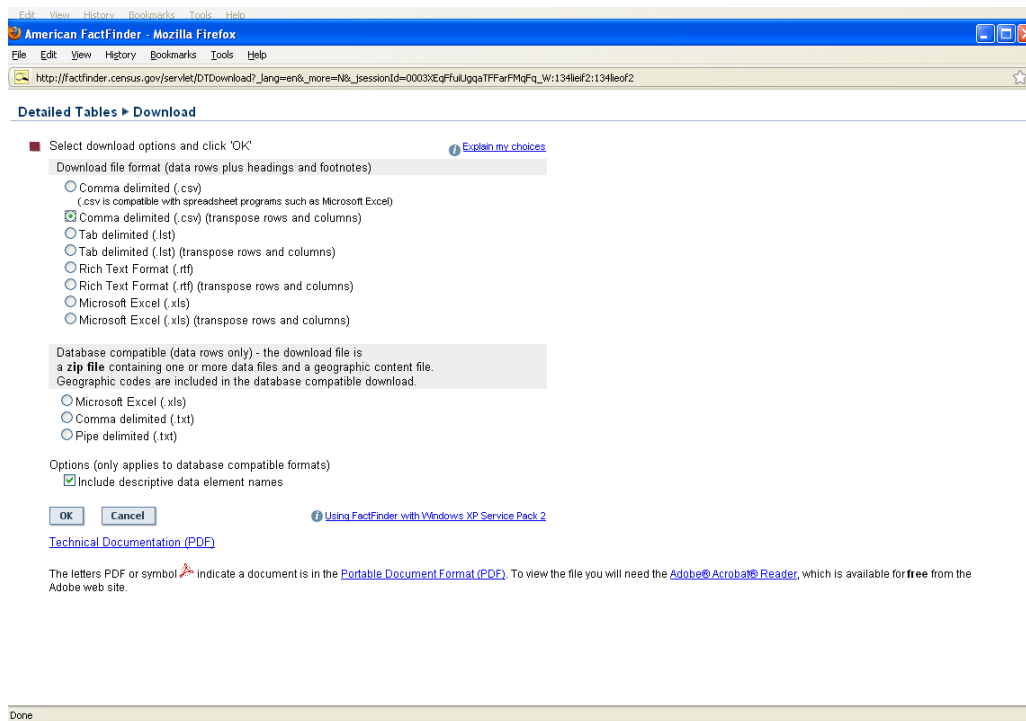
13. Select table “P53. Median Annual Household Income in 1999 (Dollars)” and click the “Add” button.



14. Click on the “Show Result” button.  
15. Click “Print / Download” at the top menu bar and select “Download.”



16. Select “Comma delimited (.CSV) (transpose rows and columns)” option and click “OK.”



17. Accept the default to open with Excel and click “OK.”

18. Your data automatically opens in Excel. Column B contains the values of Median Annual Household income for the census tracts and block groups within the benefited area.

19. Calculate the median of the Median Annual Household income by using the following Excel formula:

= MEDIAN (B7:B13).

The screenshot shows Microsoft Excel with the data downloaded from American FactFinder. The data is in column B, rows 7 to 13. The formula bar shows '=median(B7:B13)'. The data in column B is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3	P53. MEDIAN HOUSEHOLD INCOME IN 1999 (DOLLARS) [1] - Universe: Households											
4	Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data											
5	NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on											
6		Median household income in 1999										
7	Block Group 1, Census Tract 402, Yuba County, California	38,375										
8	Block Group 2, Census Tract 402, Yuba County, California	45,964										
9	Block Group 3, Census Tract 402, Yuba County, California	36,250										
10	Block Group 5, Census Tract 402, Yuba County, California	34,091										
11	Block Group 2, Census Tract 404, Yuba County, California	24,826										
12	Block Group 4, Census Tract 406, Yuba County, California	33,750										
13	Block Group 5, Census Tract 406, Yuba County, California	23,842										
14	U.S. Census Bureau											
15		=median(B7:B13)										
16												
17												
18												
19												
20												

Press “Enter” and the result is the estimated Median Annual Household income for the benefited area.

## APPENDIX D

### WATER CODE SECTION 12220

12220. The Sacramento-San Joaquin Delta shall include all the lands within the area bounded as follows, and as shown on the attached map prepared by the Department of Water Resources titled "Sacramento-San Joaquin Delta," dated May 26, 1959:

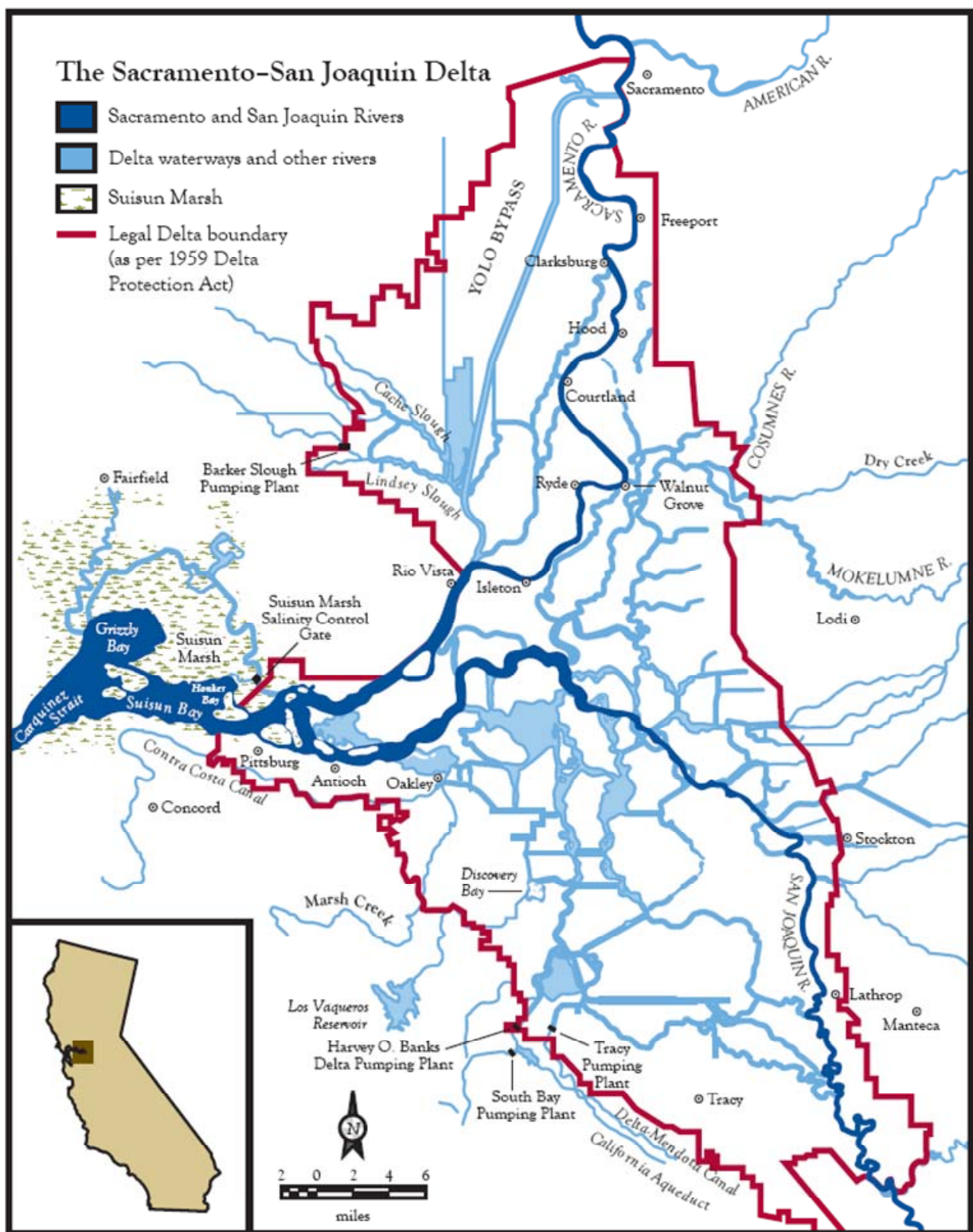
Beginning at the Sacramento River at the I Street bridge proceeding westerly along the Southern Pacific Railroad to its intersection with the west levee of the Yolo By-Pass; southerly along the west levee to an intersection with Putah Creek, then westerly along the left bank of Putah Creek to an intersection with the north-south section line dividing sections 29 and 28, T8N, R6E; south along this section line to the northeast corner of section 5, T7N, R3E; west to the northwest corner of said section; south along west boundary of said section to intersection of Reclamation District No. 2068 boundary at northeast corner of SE 1/4 of section 7, T7N, R3E; southwesterly along Reclamation District No. 2068 boundary to southeast corner of SW 1/4 of section 8, T6N, R2E; west to intersection of Maine Prairie Water Association boundary at southeast corner of SW 1/4 of section 7, T6N, R2E; along the Maine Prairie Water Association boundary around the northern and western sides to an intersection with the southeast corner of section 6, T5N, R2E; west to the southwest corner of the SE 1/4 of said section; south to the southwest corner of the NE 1/4 of section 7, T5N, R2E; east to the southeast corner of the NE 1/4 of said section; south to the southeast corner of said section; west to the northeast corner of section 13, T5N, R1E; south to the southeast corner of said section; west to the northwest corner of the NE 1/4 of section 23, T5N, R1E; south to the southwest corner of the NE 1/4 of said section; west to the northwest corner of the SW 1/4 of said section; south to the southwest corner of the NW 1/4 of section 26, T5N, R1E; east to the northeast corner of the SE 1/4 of section 25, T5N, R1E; south to the southeast corner of said section; east to the northeast corner of section 31, T5N, R2E; south to the southeast corner of the NE 1/4 of said section; east to the northeast corner of the SE 1/4 of section 32, T5N, R2E; south to the northwest corner of section 4, T4N, R2E; east to the northeast corner of said section; south to the southwest corner of the NW 1/4 of section 3, T4N, R2E; east to the northeast corner of the SE 1/4 of said section; south to the southwest corner of the NW 1/4 of the NW 1/4 of section 11, T4N, R2E; east to the southeast corner of the NE 1/4 of the NE 1/4 of said section; south along the east line of section 11, T4N, R2E to a road intersection approximately 1000 feet south of the southeast corner of said section; southeasterly along an unnamed road to its intersection with the right bank of the Sacramento River about 0.7 mile upstream from the Rio Vista bridge; southwesterly along the right bank of the Sacramento River to the northern boundary of section 28, T3N, R2E; westerly along the northern boundary of sections 28, 29, and 30, T3N, R2E and sections 25 and extended 26, T3N, R1E to the northwest corner of extended section 26, T3N, R1E; northerly along the west boundary of section 23, T3N, R1E to the northwest corner of said section; westerly along the northern boundary of sections 22 and 21, T3N, R1E to

the Sacramento Northern Railroad; southerly along the Sacramento Northern Railroad; southerly along the Sacramento Northern Railroad to the ferry slip on Chipps Island; across the Sacramento River to the Mallard Slough pumping plant intake channel of the California Water Service Company; southward along the west bank of the intake channel and along an unnamed creek flowing from Lawler Ravine to the southern boundary of the Contra Costa County Water District; easterly along the southern boundary of the Contra Costa County Water District to the East Contra Costa Irrigation District boundary; southeasterly along the southwestern boundaries of the East Contra Costa Irrigation District, Byron-Bethany Irrigation District, West Side Irrigation District and Banta-Carbona Irrigation District to the northeast corner of the NW 1/4 of section 9, T3S, R6E; east along Linne Road to Kasson Road; southeasterly along Kasson Road to Durham Ferry Road; easterly along Durham Ferry Road to its intersection with the right bank of the San Joaquin River at Reclamation District No. 2064; southeasterly along Reclamation District No. 2064 boundary, around its eastern side to Reclamation District No. 2075 and along the eastern and northern sides of Reclamation District No. 2075 to its intersection with the Durham Ferry Road; north along the Durham Ferry Road to its intersection with Reclamation District No. 17; along the eastern side of Reclamation District No. 17 to French Camp Slough; northerly along French Camp Turnpike to Center Street; north along Center Street to Weber Avenue; east along Weber Avenue to El Dorado Street; north along El Dorado Street to Harding Way; west along Harding Way to Pacific Avenue; north along Pacific Avenue to the Calaveras River; easterly along the left bank of the Calaveras River to a point approximately 1,600 feet west of the intersection of the Western Pacific Railroad and the left bank of said river; across the Calaveras River and then north 18° 26' 36" west a distance of approximately 2,870 feet; south 72° 50' west a distance of approximately 4,500 feet to Pacific Avenue (Thornton Road); north along Pacific Avenue continuing onto Thornton Road to its intersection with the boundary line dividing Woodbridge Irrigation District and Reclamation District No. 348; east along this boundary line to its intersection with the Mokelumne River; continuing easterly along the right bank of the Mokelumne River to an intersection with the range line dividing R5E and R6E; north along this range line to the Sacramento-San Joaquin County line; west along the county line to an intersection with Reclamation District No. 1609; northerly along the eastern boundary of Reclamation District No. 1609 to the Cosumnes River, upstream along the right bank of the Cosumnes River to an intersection with the eastern boundary of extended section 23, T5N, R5E; north along the eastern boundary of said extended section to the southeast corner of the NE 1/4 of the NE 1/4 of said extended section; west to the southeast corner of the NE 1/4 of the NW 1/4 of extended section 14, T5N, R5E; west to an intersection with Desmond Road; north along Desmond Road to Wilder-Ferguson Road; west along Wilder-Ferguson Road to the Western Pacific Railroad; north along the Western Pacific Railroad to the boundary of the Elk Grove Irrigation District on the southerly boundary of the N 1/2 of section 4, T5N, R5E; northerly along the western boundary of the Elk Grove Irrigation District to Florin Road; west on Florin Road to the eastern boundary of Reclamation District No. 673; northerly around Reclamation District No. 673 to an intersection with the Sacramento River and then north along the left bank of the Sacramento River to I Street bridge.

Section, range, and township locations are referenced to the Mount Diablo Base Line and Meridian. Road names and locations are as shown on the following United States Geological Survey Quadrangles, 7.5 minute series: Rio Vista, 1953; Clayton, 1953; Vernalis, 1952; Ripon, 1952; Bruceville, 1953; Florin, 1953; and Stockton West, 1952.

DRAFT

Figure D-1. Map of the Sacramento—San Joaquin Delta<sup>11</sup>



<sup>11</sup> The Original Sacramento-San Joaquin Delta Map appears in the hard-copy publication of the chaptered bill. See Chapter 1766, page 4248, Statutes of 1959.

## APPENDIX E

### Water Supply Facilities of the State Water Project

#### ***Part 1. Aqueducts of the State Water Project, Including Joint Use Facilities:***

<ol style="list-style-type: none"> <li>1. Upper Feather River Division <ol style="list-style-type: none"> <li>a. Grizzly Valley Pipeline</li> </ol> </li> <li>2. Oroville Division <ol style="list-style-type: none"> <li>a. Thermalito Power Canal</li> </ol> </li> <li>3. North Bay Aqueduct <ol style="list-style-type: none"> <li>a. Napa Pipeline</li> <li>b. Phase II Pipeline</li> </ol> </li> <li>4. South Bay Aqueduct <ol style="list-style-type: none"> <li>a. Brushy Creek Pipeline</li> <li>b. Dyer Canal</li> <li>c. Altamont Pipeline</li> <li>d. Livermore Valley Canal</li> <li>e. Alameda Canal</li> <li>f. Del Valle Pipeline</li> <li>g. Del Valle Branch Pipeline</li> <li>h. La Costa Tunnel</li> <li>i. Sunol Pipeline</li> <li>j. Mission Tunnel</li> <li>k. Santa Clara Pipeline</li> </ol> </li> <li>5. Governor Edmund G. Brown California Aqueduct</li> <li>6. San Luis Division <ol style="list-style-type: none"> <li>a. E.G. Brown California Aqueduct</li> <li>b. San Luis Canal</li> </ol> </li> <li>7. South San Joaquin Division <ol style="list-style-type: none"> <li>a. E.G. Brown California Aqueduct</li> </ol> </li> <li>8. Tehachapi Division <ol style="list-style-type: none"> <li>a. Tehachapi Tunnel No. 1</li> <li>b. Tehachapi Siphon No. 1</li> <li>c. Tehachapi Tunnel No. 2</li> <li>d. Pastoria Siphon</li> <li>e. Tehachapi Tunnel No. 3</li> <li>f. Carley V. Porter Tunnel</li> </ol> </li> <li>9. Mojave Division <ol style="list-style-type: none"> <li>a. Cottonwood Chutes</li> <li>b. Mojave Siphon</li> <li>c. Mojave Siphon Second Pipeline</li> <li>d. Mojave Siphon Powerplant Tunnel</li> <li>e. East Branch Aqueduct</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>10. Santa Ana Division <ol style="list-style-type: none"> <li>a. San Bernardino Tunnel</li> <li>b. Santa Ana Pipeline</li> </ol> </li> <li>11. West Branch <ol style="list-style-type: none"> <li>a. Oso Canal</li> <li>b. Quail Canal</li> <li>c. Lower Quail Canal</li> <li>d. Peace Valley Pipeline</li> <li>e. Gorman Creek Channel Improvements</li> <li>f. Angeles Tunnel</li> </ol> </li> <li>12. Coastal Branch <ol style="list-style-type: none"> <li>a. Coastal Aqueduct</li> <li>b. Phase I Canal</li> <li>c. Phase II Pipeline: <ol style="list-style-type: none"> <li>A. Reach No. 1 - Devil's Den to Cholame Valley</li> <li>B. Reach No. 2 - Cholame Valley to Shedd Canyon</li> <li>C. Reach No. 3 - Shedd Canyon to Calf Canyon</li> <li>D. Reach No. 4 - Calf Canyon to Cuesta Canyon</li> <li>E. Cuesta Tunnel</li> <li>F. Reach No. 5A1 - Cuesta Tunnel to Fiscalini Ranch</li> <li>G. Reach No. 5A2 - Fiscalini Ranch to Talley Farms</li> <li>H. Reach No. 5B - Talley Farms to Nipomo</li> <li>I. Reach No. 6 - Nipomo to Vandenberg Air Force Base</li> </ol> </li> </ol> </li> </ol>
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**Part 2. Hydroelectric or Pumping Plants of the State Water Project:**

<ol style="list-style-type: none"> <li>1. Oroville Division <ol style="list-style-type: none"> <li>a. Edward Hyatt Powerplant</li> <li>b. Thermalito Powerplant</li> <li>c. Thermalito Diversion Dam Powerplant</li> <li>d. Sutter-Butte Outlet Powerplant</li> </ol> </li> <li>2. North Bay Aqueduct <ol style="list-style-type: none"> <li>a. Barker Slough Pumping Plant</li> <li>b. Cordelia Pumping Plant</li> </ol> </li> <li>3. South Bay Aqueduct <ol style="list-style-type: none"> <li>a. South Bay Pumping Plant</li> <li>b. Del Valle Pumping Plant</li> </ol> </li> <li>4. North San Joaquin Division <ol style="list-style-type: none"> <li>a. Harvey O. Banks Delta Pumping Plant</li> </ol> </li> <li>5. San Luis Division <ol style="list-style-type: none"> <li>a. William R. Gianelli Pumping - Generating Plant</li> <li>b. Dos Amigos Pumping Plant</li> </ol> </li> <li>6. South San Joaquin Division <ol style="list-style-type: none"> <li>a. Buena Vista Pumping Plant</li> <li>b. John R. Teerink Wheeler Ridge Pumping Plant</li> <li>c. Ira J. Chrisman Wind Gap Pumping Plant</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>7. Tehachapi Division <ol style="list-style-type: none"> <li>a. A.D. Edmonston Pumping Plant</li> </ol> </li> <li>8. Mojave Division <ol style="list-style-type: none"> <li>a. Alamo Powerplant</li> <li>b. Pearblossom Pumping Plant</li> <li>c. Mojave Siphon Powerplant</li> </ol> </li> <li>9. Santa Ana Division <ol style="list-style-type: none"> <li>a. Devil Canyon Powerplant</li> </ol> </li> <li>10. West Branch <ol style="list-style-type: none"> <li>a. Oso Pumping Plant</li> <li>b. William E. Warne Powerplant</li> <li>c. Castaic Powerplant</li> </ol> </li> <li>11. Coastal Branch <ol style="list-style-type: none"> <li>a. Las Perillas Pumping Plant</li> <li>b. Badger Hill Pumping Plant</li> <li>c. Devil's Den Pumping Plant</li> <li>d. Bluestone Pumping Plant</li> <li>e. Polonio Pass Pumping Plant</li> </ol> </li> </ol>
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**Part 3. Reservoirs or Dams of the State Water Project:**

<ol style="list-style-type: none"> <li>1. Upper Feather River Division <ol style="list-style-type: none"> <li>a. Frenchman Dam</li> <li>b. Frenchman Lake</li> <li>c. Antelope Dam</li> <li>d. Antelope Lake</li> <li>e. Grizzly Valley Dam</li> <li>f. Lake Davis</li> </ol> </li> <li>2. Oroville Division <ol style="list-style-type: none"> <li>a. Oroville Dam</li> <li>b. Lake Oroville</li> <li>c. Parish Camp Saddle Dam</li> <li>d. Bidwell Canyon Saddle Dam</li> <li>e. Feather River Fish Barrier Dam</li> <li>f. Thermalito Diversion Dam</li> <li>g. Thermalito Diversion Pool</li> <li>h. Thermalito Forebay Dam</li> <li>i. Thermalito Forebay</li> <li>j. Thermalito Afterbay Dam</li> <li>k. Thermalito Afterbay</li> </ol> </li> <li>3. North Bay Aqueduct <ol style="list-style-type: none"> <li>a. Napa Turnout Reservoir</li> <li>b. Cordelia Forebay</li> </ol> </li> <li>4. South Bay Aqueduct <ol style="list-style-type: none"> <li>a. Patterson Reservoir</li> <li>b. Del Valle Dam</li> <li>c. Lake Del Valle</li> </ol> </li> <li>5. North San Joaquin Division <ol style="list-style-type: none"> <li>a. Clifton Court Forebay Dam</li> <li>b. Clifton Court Forebay</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>6. San Luis Division <ol style="list-style-type: none"> <li>a. O'Neill Dam</li> <li>b. O'Neill Forebay</li> <li>c. B.F. Sisk San Luis Dam</li> <li>d. San Luis Reservoir</li> <li>e. Los Banos Detention Dam</li> <li>f. Los Banos Reservoir</li> <li>g. Little Panoche Detention Dam</li> <li>h. Little Panoche Reservoir</li> <li>i. Arroyo Pasajero Impoundment Basin</li> </ol> </li> <li>7. Tehachapi Division <ol style="list-style-type: none"> <li>a. Tehachapi Afterbay</li> </ol> </li> <li>8. Mojave Division <ol style="list-style-type: none"> <li>a. Cedar Springs Dam</li> <li>b. Silverwood Lake</li> </ol> </li> <li>9. Santa Ana Division <ol style="list-style-type: none"> <li>a. Devil Canyon Powerplant Afterbay</li> <li>b. Devil Canyon Powerplant Second Afterbay</li> <li>c. Perris Dam</li> <li>d. Lake Perris</li> </ol> </li> <li>10. West Branch <ol style="list-style-type: none"> <li>a. Quail Lake</li> <li>b. Pyramid Dam</li> <li>c. Pyramid Lake</li> <li>d. Elderberry Forebay</li> <li>e. Elderberry Forebay Dam</li> <li>f. Castaic Dam</li> <li>g. Castaic Lake</li> </ol> </li> </ol>
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c. Bethany Dams d. Bethany Reservoir	
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***Part 4. Other Water Supply Facilities of the State Water Project:***

1. Oroville Division <ul style="list-style-type: none"> <li>a. Oroville Area Control Center</li> </ul> 2. North Bay Aqueduct <ul style="list-style-type: none"> <li>a. Cordelia Surge Tank</li> <li>b. Creston Surge Tank</li> <li>c. Travis Surge Tank</li> </ul> 3. South Bay Aqueduct <ul style="list-style-type: none"> <li>a. Santa Clara Terminal Facilities</li> </ul> 4. North San Joaquin Division <ul style="list-style-type: none"> <li>a. Delta Area Control Center</li> </ul> 5. San Luis Division <ul style="list-style-type: none"> <li>a. San Luis Area Control Center</li> </ul> 6. South San Joaquin Division <ul style="list-style-type: none"> <li>a. Kern River Intertie</li> <li>b. San Joaquin Area Control Center</li> </ul> 7. Mojave Division <ul style="list-style-type: none"> <li>a. First Los Angeles Aqueduct Connection</li> <li>a. Cedar Springs Dam Maintenance Station</li> </ul>	8. Santa Ana Division <ul style="list-style-type: none"> <li>a. San Bernardino Tunnel Intake Structure</li> <li>b. Perris Dam Maintenance Station</li> </ul> 9. West Branch <ul style="list-style-type: none"> <li>a. Angeles Tunnel Intake Works</li> <li>b. Southern California Area Control Center</li> </ul> 10. East Branch <ul style="list-style-type: none"> <li>a. First Los Angeles Aqueduct Connection</li> </ul> 11. Coastal Branch <ul style="list-style-type: none"> <li>a. Tank Site 1 - Polonio Pass</li> <li>b. Tank Site 2 - Creston</li> </ul>
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